

Northamptonshire County Council.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1913,

INCLUDING A

Summary of the Annual Reports of the District
Medical Officers of Health,

BY

CHARLES E. PAGET,

County Medical Officer of Health,


TOGETHER WITH A

Supplementary Report by the Chief Tuberculosis
Officer.

KETTERING :

T. BEATY HART, Bridewell Printing Works, Green Lane.

1914.



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NORTHAMPTONSHIRE COUNTY COUNCIL.

ANNUAL REPORT

OF THE

Medical Officer of Health.

FOR THE YEAR 1913.

I HAVE herewith the honour to present the Seventeenth Annual Report of the Medical Officer of Health to the County Council of Northamptonshire, including a summary of the Annual Reports of the Medical Officers of Health for the several Districts within the Administrative County. The arrangement of the report is the same practically as that of its predecessors ; but it contains, for the first time, an additional section in the form of a supplementary report of the treatment of tuberculosis within the County by the Chief Tuberculosis Officer, who commenced to take up his duties on the 1st January, 1913.

During the year 1913, there were five **Inquiries held by the Local Government Board**, as shown in the following table :

Date.	Sanitary District.	Subject.	Amount of Loan.	Result.
Feb. 10th	Rushden Urban ...	Failure to exercise powers under Part III. of the Housing of the Working Classes Act, 1890, in regard to the provision of Working Class dwellings.	—	Council gave undertaking to erect 30 houses.
Apr. 30th	Oundle Urban ...	Additional accommodation at Infectious Diseases Hospital.	£1,102	Sanctioned.
" "	" Rural ...	Ditto. Ditto.	£300	Sanctioned.
Oct. 14th	Potterspury Rural ...	Potterspury Water Supply	£3,700	Referred back
Nov. 18th	Raunds Urban ...	Re-construction of Culvert	£600	Awaiting decision

In continuance of my summary of the events in connection with the **Sanatorium Benefits under the National Insurance Act, 1911**, set out in my annual report for the year 1912, and terminating in the appointment of Dr. O. A. J. N. Muriset as Chief Tuberculosis Officer for the Administrative County, I have now to set out the course of further administrative procedure, which was pursued during the year under review, for the purpose of bringing these benefits into operation. Early in the year, the Chief Tuberculosis Officer, after consultation with myself, drew up a report on the suggested scheme for dealing with tuberculosis in the Administrative County of Northampton, and this, as amended by the Public Health, Housing and Local Government Committee and then adopted, came up for consideration by the County Council at their meeting on the 8th May, 1913. At that meeting the Council resolved that they were prepared to enter into arrangements with the Northamptonshire Insurance Committee with a view to providing treatment in sanatoria and other institutions for insured persons suffering from tuberculosis, and were prepared also, subject to the conclusion of a satisfactory agreement with the Insurance Committee, to undertake the institutional treatment of the dependants of insured persons to whom sanatorium benefit had been extended by the Insurance Committee, and that of non-insured persons, and for this purpose approved generally of the scheme prepared by the Public Health, Housing and Local Government Committee. In view, however, of what they considered to be the inadequate financial assistance provided by the Exchequer towards carrying out the scheme, of the uncertainty of the number of persons to be treated, and of the amount of the funds available from all sources for the purpose, the Council decided that they could not pledge themselves at present to the carrying out of every detail of the scheme within any given period.

It was decided that, in the first instance, steps should be taken to establish three main Dispensaries at Northampton,

Kettering, and Wellingborough respectively, and that, in the second place, negotiations should be proceeded with to bring about, if possible, a combination with the Trustees of the existing Creton Sanatorium and the Northampton Borough Council for the joint provision of Sanatorium accommodation, on the basis of at least 40 beds being available for County purposes.

During the succeeding months of the year, active steps were taken, with the approval of the Local Government Board, for the establishment of the three Main Dispensaries, but unexpected difficulties intervened to retard the bringing the three bodies concerned into agreement for the establishment of a joint Tuberculosis Sanatorium. By the end of the year the three Main Dispensaries were established, each with a fully trained nurse, and a laboratory for the Chief Tuberculosis Officer was fitted up also at the Dispensary in Northampton. There was, moreover, a good prospect that at least a Provisional Joint Committee would be formed early in 1914, for the purpose of establishing the Tuberculosis Sanatorium to meet the requirements of the Borough and County of Northampton.

The Chief Tuberculosis Officer has furnished me with a statement, illustrated by tables and diagrams, descriptive of the work carried out by him as Medical Adviser to the Northamptonshire Insurance Committee in respect of cases of Tuberculosis, and it is placed as Appendix I. of this report.

It is with much satisfaction that I am able to continue to speak highly of the work of the **Health Visitation of Infants**, which was carried out during the year by a staff of four Female Health Visitors. It will be remembered that the number of such officers was increased in December, 1912, from one to four, the results of the employment of Miss Robinson, the first Health Visitor, for the five preceding years having fully illustrated the importance of this work. I have always

considered that the care of infant life was the public health duty of the respective District Councils of the County, whether singly or in combination ; but, with the single exception of the Urban District Council of Kettering, no appointment of a Health Visitor has been made so far by any of the District Councils. In the meantime, therefore, it has lain with the County Council to appoint these officers as missionaries and stimulators of public opinion in the matter. There would be no need for County Health Visitors if the District Councils carried out the work of the health visitation of infants, and I hope that in time the recognition of the value of supervising the up-bringing of infants may lead local authorities to regard this work as an essential part of their public health administration. A detailed statement of the work done during the year by the four Health Visitors, in the areas of the County allocated to them, will be found in Appendix II. of this report. It will be seen from this that they paid an aggregate of 7,591 visits, and were chiefly concerned as to the management of 1,077 newly born infants during the year. At the end of the current year, it is intended to move these Health Visitors into other areas of the County, so as to spread a knowledge of the good resulting from their ministrations.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

As for the year 1912, so for that of 1913, there was a considerable proportion of the annual reports of the District Medical Officers of Health which did not reach me till after the end of the first quarter of the year 1914. This is very largely due, no doubt, to the increasing requirements of the Local Government Board with regard to the information to be contained in the reports. At the same time, I am glad to record and acknowledge the very great desire, on the part of my colleagues in the County, to minimise, as much as possible, the inconvenience which arises from a late compliance with the regulation that requires as early a presentation as possible of their annual reports. The reports for the

year 1913 show generally a large appreciation of the requirements in respect of information, which they are intended to supply.

The following table shows the dates on, and the form in, which the respective Annual Reports were received by me :—

NAME OF DISTRICT.	DATE OF RECEIPT.		FORM.	
Daventry Rural	...	January 31st, 1914	...	Printed.
Hardingstone Rural	...	February 9th	..	..
Northampton Rural 17th	..	..
Higham Ferrers Borough 23rd	..	..
Brixworth Rural	...	March 2nd	..	..
Gretton Rural 6th	..	..
Brackley Borough 9th	..	..
Finedon Urban 9th	..	..
Oundle Rural 9th	..	..
Desborough Urban 13th	..	..
Rushden Urban 13th	..	..
Rothwell Urban 19th	..	..
Irthlingborough Urban 23rd	..	..
Raunds Urban 23rd	..	..
Brackley Rural 23rd	..	..
Kettering Rural 24th	..	..
Towcester Rural 24th	..	..
Daventry Borough 27th	..	..
Oxendon Rural 31st	..	..
Thrapston Rural	...	April 1st	..	..
Middleton Cheney Rural 3rd	..	..
Wellingborough Urban 6th	..	..
Wellingborough Rural 9th	..	..
Oundle Urban 15th	..	..
Crick Rural 15th	..	..
Kettering Urban 21st	..	..
Easton-on-the-Hill Rural 23rd	..	M.S.
Potterspury Rural 30th	..	Printed.

It will be noted that the only unprinted report received was that for the Easton-on-the-Hill Rural District.

AREA AND POPULATION.

There having been no change made in respect of the area of the Administrative County during the year 1913, this remains the same as for the preceding year. The twelve Urban Districts have a total area of 40,032 acres, and the sixteen Rural Districts contain 541,647 acres, making a total area for the County of **581,679** acres.

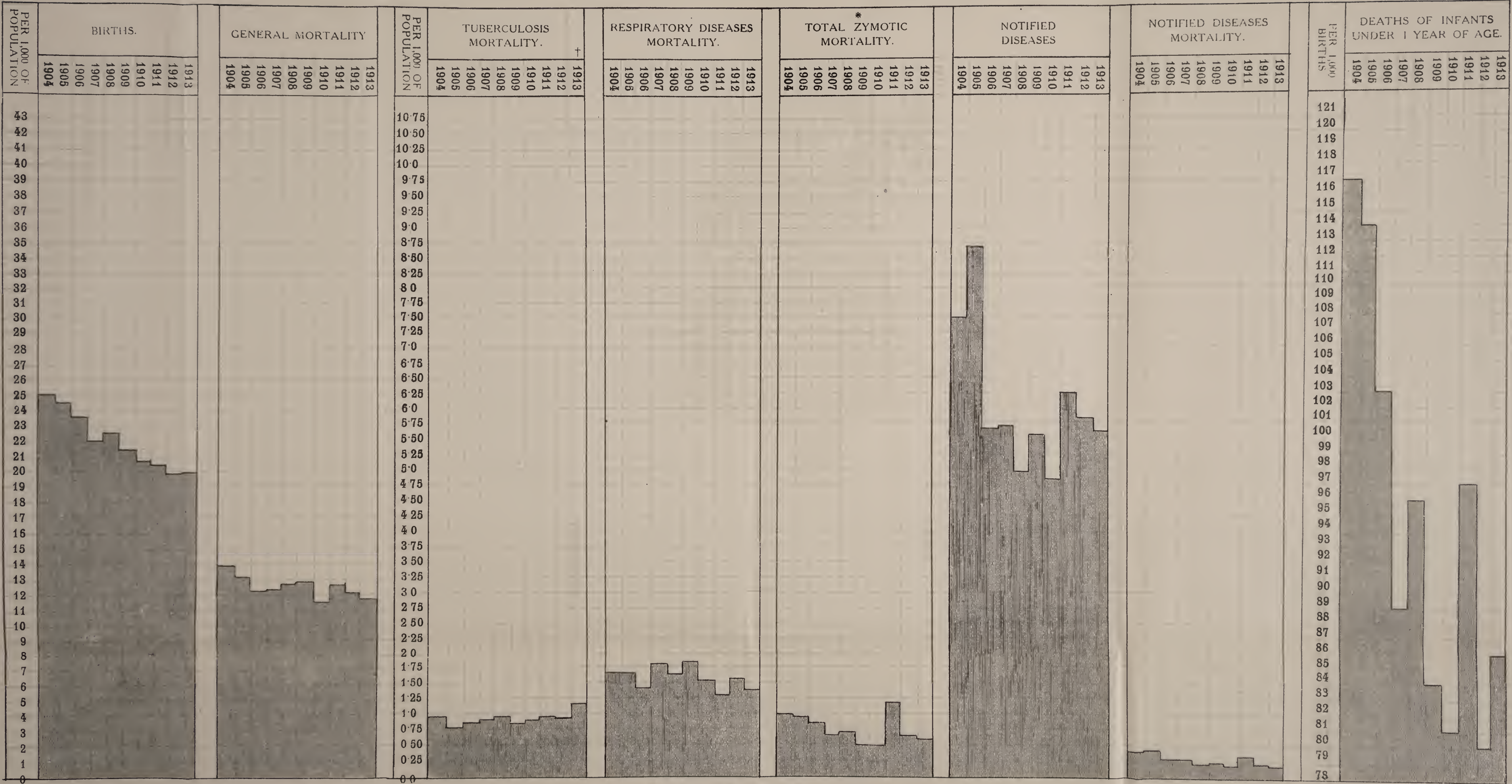
POPULATION.—Calculated from the returns contained in the Annual Reports of the District Medical Officers of Health, the estimated population of the County at the middle of the year 1913 amounted to **215,579** persons, of whom 97,102 belonged to the Combined Urban Districts, and 118,477 to the Combined Rural Districts. The total estimated population for the year 1912 was 215,091 persons.

BIRTHS.

In his preliminary report for the year 1913, the Registrar-General states that the birth-rate in England and Wales was 23.9 per 1,000 of the population, which is 0.1 per 1,000 above the rate in 1912, but lower than the rate in any other year on record, and that, compared with the average in the ten years 1903—1912, the birth-rate in 1913 showed a decrease of 2.4 per 1,000. The rate for the County during 1913 was 0.02 per 1,000 of population higher than in the year 1912, and, as compared with the average for the County during the ten years 1903—1912, showed a decrease of 2.73 per 1,000 of the population. The year 1913 thus makes a break in the steady decline of the birth-rate, which has taken place regularly since the year 1908.

There was a nett total of 4,296 births in the Administrative County of Northampton during the year 1913, as against 4,281 births in 1912, 4,378 births in 1911, 4,430 births in 1910, and 4,597 births in 1909. Of the births for the year

CHART SHEWING RATES OF BIRTHS AND CERTAIN MORTALITIES, &c.



* Inclusive of Deaths from Diseases not Notifiable.

† This column includes Deaths from all forms of Tuberculosis, and is not confined to Pulmonary Tuberculosis as in previous years.

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1913, 1,998 belonged to the Combined Urban Districts, as against 1,956 in the year 1912, and 2,298 to the Combined Rural Districts, as against 2,325 in the year 1912.

The average birth-rate of the whole Administrative County per 1,000 of the population, and of the Combined Urban and Rural Districts respectively for the years 1904-1913 is shown in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the 96 large towns in England and Wales, taken from the Registrar General's returns :—

Areas.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Adminis- trative County	25.12	24.59	23.70	21.96	22.42	21.61	20.77	20.47	19.90	19.92
Urban Districts ...	27.32	25.93	25.09	22.82	22.82	22.43	21.28	20.69	20.23	20.57
Rural Districts ...	23.39	23.52	22.60	21.27	22.10	20.96	20.35	20.29	19.63	19.39
England & Wales ..	27.9	27.2	27.0	26.3	26.5	25.6	24.8	24.4	23.8	23.9
Large Towns in England & Wales ...	29.1	28.2	27.9	27.0	27.0	25.7	25.0	25.6	24.9	25.1

*It is to be noted that the group of large towns numbers 76 from the year 1902 to 1909 ; it consisted of 33 towns in preceding years. The group now consists of 96 towns, including London.

The nett birth rate varied in the Urban Districts from 16.0 per 1,000 of the population in the Oundle District to 25.4 per 1,000 of the population in the Rothwell District, and in the Rural Districts the rate was from 15.4 per 1,000 in the Oxendon District to 25.1 per 1,000 in the Northampton District.

Arranged in the order of their nett birth-rates the Urban Districts stand thus :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Oundle	...	16.0	Raunds	...	20.9
Rushden	...	17.2	Kettering	...	21.4
Brackley Borough	...	18.9	Desborough	...	21.8
Higham Ferrers Boro'	...	20.1	Finedon	...	21.9
Wellingborough	...	20.1	Irthlingborough	...	23.1
Daventry Borough	...	20.7	Rothwell	...	25.4

The position of the Rural Districts in respect of their nett birth-rates is as follows :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Oxendon	...	15.4	Easton-on-the-Hill	...	19.4
Gretton	...	15.7	Crick	...	19.5
Potterspury	...	17.1	Middleton Cheney	...	19.8
Thrapston	...	17.7	Daventry	...	20.4
Wellingborough	...	17.7	Oundle	...	21.1
Towcester	...	17.8	Hardingstone	...	22.1
Brackley	...	18.4	Kettering	...	22.3
Brixworth	...	19.0	Northampton	...	25.1

DEATHS.

General Mortality.—In his preliminary report for the year 1913, the Registrar-General states that the death-rate in England and Wales was 13.7 per 1,000 of the population, which was 0.4 per 1,000 above the rate in 1912; compared with the average rate in the ten years 1903-1912, the death-rate in 1913 showed a decrease of 1.2 per 1,000. In the Administrative County of Northampton, the general mortality rate for the year 1913 was very satisfactory, and compares most favourably with the rates for the ten preceding years. Thus, the nett general mortality rate for the County in 1913 was 11.71 per 1,000 of the population, which is 0.38

per 1,000 below the County Rate for 1912, and 0.99 per 1,000 below the average County rate for the ten years 1903-1912, while it is 2.99 per 1,000 less than the same rate for England and Wales. The rate for the County in any case may be regarded as a very satisfactory one, being below 12.0 per 1,000 of the population, but still more so as it shows a decrease on the year preceding while the rate for England and Wales shows an increase. This last fact is due no doubt to the factor of infantile mortality to which attention is drawn under that heading.

The total number of deaths allocated to the Administrative County for the year 1913 was 2,525 as against registered deaths of 2,471 persons in the County; of these deaths, 1,011 belonged to the Combined Urban Districts, and 1,514 to the Combined Rural Districts. In supplement to the distribution of transferable deaths by the Registrar-General, I have again to record my grateful acknowledgements to the Medical Superintendent of the Berry Wood Asylum, to whom I am indebted for the particulars contained in Table III. of this Report.

The following table shows the general mortality rates for the Administrative County, England and Wales, and certain large towns as already referred to, during the years 1904-1913 :—

Areas.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Adminis- trative County ...	13.98	13.21	12.29	12.34	12.76	12.90	11.54	12.59	12.09	11.71
England & Wales ...	16.2	15.2	15.1	15.0	14.7	14.5	13.4	14.6	13.3	13.7
Large Towns in England & Wales ...	17.2	15.7	15.9	15.4	15.8	15.6	13.4	16.1	14.6	14.3

The nett general mortality rate varied in the Urban Districts from 7.5 per 1,000 of the population in Brackley Borough to 16.4 in Daventry Borough, and in the Rural Districts from 9.2 in the Brackley District to 16.8 in the Easton-on-the-Hill District.

Arranged in the order of their nett general death-rates the Urban Districts stand thus :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Brackley Borough	...	7.5	Higham Ferrers Boro'		12.6
Irthlingborough	...	8.3	Oundle	...	12.7
Rushden	...	8.7	Raunds	...	13.1
Wellingborough	...	9.0	Finedon	...	13.4
Rothwell	...	9.9	Desborough	...	13.7
Kettering	...	10.4	Daventry Borough	...	16.4

The position of the Rural Districts in respect of their nett general death-rates is as follows :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Brackley	...	9.2	Brixworth	...	12.4
Gretton	...	9.8	Daventry	...	14.1
Kettering	...	11.1	Middleton Cheney	...	14.3
Oxendon	...	11.2	Thrapston	...	14.3
Wellingborough	...	11.2	Northampton	...	14.7
Oundle	...	11.3	Towcester	...	15.5
Crick	...	11.8	Hardingstone	...	15.9
Potterspury	...	11.9	Easton-on-the-Hill	...	16.8

Infantile Mortality.—The Infantile Mortality rate for the Administrative County of Northampton during the year 1913 was 85 per 1,000 births, as against 79 for the year 1912, and as against the average of 95 for the ten years 1903-1912.

The average infantile death rate for the whole Administrative County per 1,000 births, and of the Combined Urban

and Rural Districts respectively, for the years 1904-1913 is shown in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the large towns, taken from the Registrar-General's returns :—

Areas.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Adminis- trative County ...	116	113	102	88	95	83	80	96	79	85
Urban Districts ...	117	120	116	89	108	100	91	105	88	89
Rural Districts ...	115	106	91	87	84	68	71	88	72	82
England & Wales ...	146	128	133	118	121	109	106	130	95	109
Large Towns in England & Wales ...	160	140	145	127	128	118	115	110	101	117

The infantile mortality rate varied in the Urban Districts from 20.0 per 1,000 births in Brackley Borough, to 123.2 in Daventry Borough, and in the Rural Districts from 53.6 in the Oundle District to 166.6 in the Easton-on-the-Hill District.

Arranged in the order of their infantile mortality rates the Urban Districts stand thus :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Brackley Borough ...	20.0	Higham Ferrers Boro'	89.2
Irthlingborough ...	46.2	Rothwell ...	91.6
Oundle ...	68.1	Finedon ...	108.4
Wellingborough ...	69.1	Desborough ...	108.6
Rushden ...	80.1	Kettering ...	109.3
Raunds ...	86.4	Daventry Borough ...	123.2

The position of the Rural Districts in respect of their infantile mortality rates is as follows :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Oundle ...	53.6	Crick ...	86.9
Middleton Cheney ...	58.8	Brixworth ...	88.4
Brackley ...	67.6	Potterspury ...	89.8
Northampton ...	68.9	Thrapston ...	89.9
Oxendon ...	75.7	Daventry ...	92.1
Wellingborough ...	75.8	Towcester ...	96.2
Kettering ...	79.3	Gretton ...	125.0
Hardingstone ...	83.8	Easton-on-the-Hill ...	166.6

The most interesting feature to be noted in respect of the infantile mortality is the fact that, though the increase per 1,000 births over the year 1912 was only 6 for this County, the like increase for England and Wales amounted to 14. To this, in part, is due doubtless the fact referred to already that, while the general mortality rate for this County showed a decrease as compared with the year 1912, the rate for England and Wales showed an increase. In this connection, it cannot be overlooked that the close attention given by the Health Visitors, employed in parts of the County, to the up-bringing of infants has resulted in practical proof of their usefulness, and to the credit of the County. I am glad to be able to append some of the opinions of my colleagues in the County on this point :—

BRACKLEY BOROUGH.—“ The health visitor who has been
 “ sent to reside in the district for a time under the auspices
 “ of the County Council, with the object of following up
 “ newly-born children and advising the mothers as to their
 “ care and also to assist in improving domestic hygiene,
 “ continues her work, which must prove of great benefit in
 “ the homes of the poor.”

DESBOROUGH URBAN.—“ Although ante—as well as post-natal influences, over the former of which the mothers in the circumstances had little or no control, were partially responsible for the increased mortality, there was good reason for believing that the latter might have been counteracted by the exercise of more care in the feeding and general management of the infants, and by reference to the printed cards of instructions and advice supplied by the County Council. Here one is impressed with the necessity for the permanent services of a Health Visitor, who would not only teach but also be in a position to ensure that her teaching had practical application. . . The question of appointing such an Officer for the Districts of Rothwell and Desborough jointly is being considered.”

IRTHLINGBOROUGH URBAN.—“ A County Council Health Visitor has made regular visits during the year, for the purpose of following up newly-born children, and giving help and advice to mothers. She has had no trouble in obtaining particulars of the births from the midwives and myself, and I am sure her attention and advice have been appreciated.” In this connection it is significant of the infantile mortality-rate of 46.29 per 1,000 births that the Medical Officer of Health declares it “ the lowest yet recorded.”

KETTERING URBAN.—“ During the ensuing year the Health Visitor is going to make a note of women who work in the factories during and after pregnancy. A class for mothers will also be instituted; it is to be hoped a good number of expectant mothers will make an effort to attend.” This action is the outcome of the fact that, in respect of the Infantile Mortality of the District for the year, “ a large proportion of these deaths were certified as Premature Births, &c.”

RAUNDS URBAN.—“ The number of deaths from preventible causes was fairly low compared with other places, and in

“ connection with this I may mention that a Lady Health
 “ Visitor calls regularly every week on those who have young
 “ children to bring up, and no doubt gives valuable help to
 “ the mothers regarding the feeding and up-bringing of their
 “ infants.”

ROTHWELL URBAN.—Infantile mortality “ shows a decided
 “ increase compared with that of last year, eleven infants
 “ dying under one year of age, and six of these before the
 “ end of the first month. There is no doubt that having
 “ no Lady Inspector makes a great difference, as during the
 “ three years that Miss Robinson worked here the Infant
 “ Mortality steadily decreased.”

WELLINGBOROUGH URBAN.—“ Fortunately, at present, our
 “ Infantile Mortality is comparatively low, but there is no
 “ saying how long it will continue so, and there is still room
 “ for improvement. There is no doubt that a great deal of
 “ good could be done in the way of educating mothers in
 “ the feeding and general care of infants if we had a suitable
 “ Health Visitor.”

Tuberculosis Mortality.—In view of the changes which have been brought about through the compulsory notification of non-pulmonary as well as pulmonary tuberculosis, it appears to be more desirable and useful that the term “ phthisis ” should be dispensed with now and that the grouping should be classified under the heading of “ tuberculosis.” In furtherance of this plan, I append herewith a return, which has been sent already by request to the Local Government Board, of the notifications of tuberculosis in this County from the 1st of February, 1913, to the 3rd of January, 1914; this shows their distribution in point of age and classification.

It has to be noted here also, that, with the view of assisting to reduce the liability to the spread of pulmonary tuberculosis, the County Council made a Bye-law to prohibit Spitting in

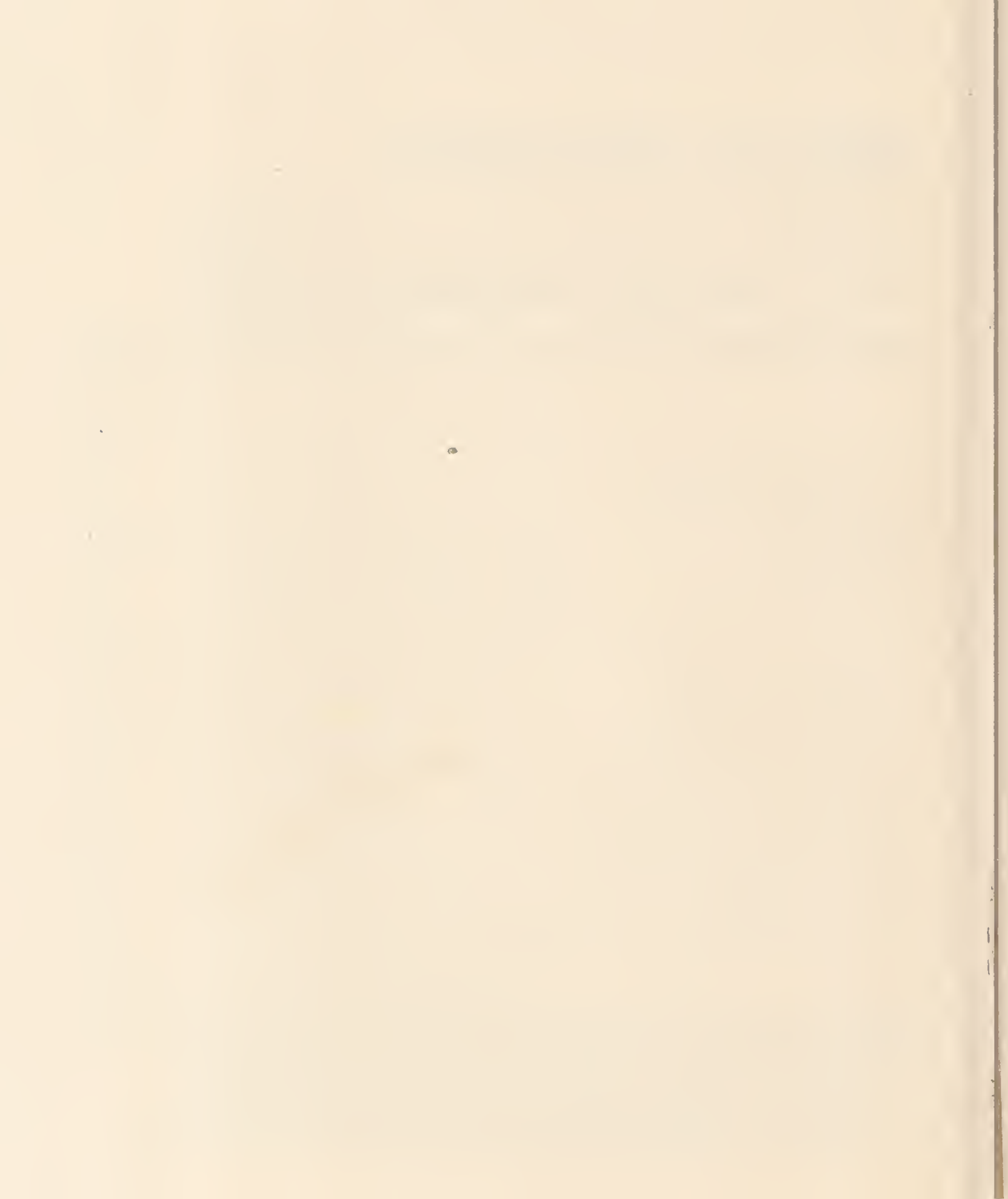
COUNTY OF NORTHAMPTON.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from 1st February, 1913, to the end of the week ended on the 3rd January, 1914.

AGE PERIODS.	NUMBER OF NOTIFICATIONS ON FORM A.													NUMBER OF NOTIFICATIONS ON FORM B.				NUMBER OF NOTIFICATIONS ON FORM C.		
	PRIMARY NOTIFICATIONS.												Total Notifications (i.e., including cases previously notified by other doctors).	PRIMARY NOTIFICATIONS.			Total Notifications (i.e., including cases previously notified by other doctors).	Poor Law Institutions.	Sanatoria.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	TOTAL.		Under 5	5 to 10	10 to 15				TOTAL.
Pulmonary Males ...	1	2	16	27	35	28	53	43	24	9	2	240	242	2	7	7	16	16	1	5
Pulmonary Females ...	1	6	11	16	37	37	59	38	18	3	1	227	230	4	6	3	13	13	3	6
Non-pulmonary Males ...	2	9	14	13	6	4	9	2	3			62	65		1	1	2	2		
Non-pulmonary Females	1	8	9	13	17	6	17	7	7			85	89	1	3	1	5	5		
	5	25	50	69	95	75	138	90	52	12	3	614	626	7	17	12	36	36	4	11

Form A. means Form of Notification by Medical Practitioners (other than School Medical Inspectors) of cases not previously notified.
Form B. means Form of Notification by a School Medical Inspector of cases not previously notified by him.
Form C. means Form of Notification to be used by Medical Officers of Poor Law Institutions and Sanatoria for patients who have been notified before admission.



Public Buildings or Carriages, and the seal of the Council was ordered to be affixed thereto at the Council's meeting on the 23rd of October, 1913. It is hoped that this action of the County Council will have a useful effect in calling attention to a disgusting habit, which is fraught with danger to the public, and so lead to its being decidedly checked.

The subject of tuberculosis forms a prominent feature in most of the reports of the Medical Officers of Health for the year 1913, and it is very evident that the formulation of the County scheme for dealing with tuberculosis, occurring in insured persons and their dependants and also in un-insured persons, has met with approbation generally. It is plain, however, that regret is felt at the unavoidable delay which has arisen in the further provision of Sanatorium accommodation, and that a speedy settlement of the difficulties in connection therewith will be welcomed. While the provision of shelters forms part of the scheme for dealing with tuberculosis in the County, in respect of the Domiciliary treatment of patients, and each of the three main dispensaries established already has been supplied with two such shelters, it is evidence of local interest in the matter to know that this aid to treatment has been supplemented in some of the Districts in the County. The following few extracts taken from the reports are sufficient to illustrate the foregoing points, as well as to furnish evidence of the successful commencement in the year 1913 of the work of the Tuberculosis Officer towards the reduction of mortality from this disease.

DESBOROUGH URBAN.—“The shelter provided by the
“Council continues to be very useful; and in view of the
“increasing number of sufferers on the list for Sanatorium
“benefit another has almost become necessary.”

KETTERING URBAN.—“It may be interesting to note that
“since the beginning of July, 1913, the County Tuberculosis
“Officer has been in attendance at the Temperance Hall,

“ Gold Street, Kettering, twice a week, and I understand
 “ that a large number of patients suffering from Pulmonary
 “ Tuberculosis have availed themselves of his services.”

RAUNDS URBAN.—“ Sanatorium patients from this district
 “ have done wonderfully well, and I am only sorry that more
 “ of them have not been able to be admitted up to now.”

CRICK RURAL.—An open-air shelter has been provided, and
 is being used for a chronic case.

DAVENTRY RURAL.—The Council “ decided to purchase
 “ some open-air shelters.”

OXENDON RURAL.—For a case of phthisis at Braybrooke,
 which had undergone previous sanatorium treatment and
 been sent home in an advanced stage of the disease, “ the
 “ Council acquired a shelter which was erected in a field
 “ adjoining the patient’s home.”

The total number of cases notified in the County during
 the year 1913 was 671. Of these cases, 375 were in the
 Combined Urban Districts, and 296 in the Combined Rural
 Districts.

The total number of deaths registered in the Adminis-
 trative County as due to Tuberculosis during the year 1913
 was 250, and of these, 132 belonged to the Combined Urban
 Districts, and 118 to the Combined Rural Districts. The
 deaths which occurred from Tuberculosis in the Berry Wood
 Asylum of persons belonging to the Administrative County
 have been allocated, as far as possible, to the Districts from
 which they came. Of the total deaths from Tuberculosis,
 20 were of children under 5 years of age, or 8 per cent. of the
 total deaths from this disease as against 1.52 per cent. in 1912,
 2.45 per cent. in 1911, 3.15 per cent. in 1910, and 3.78 per
 cent. in 1909. The average rate for Phthisis for the five years

1903 to 1907 was 0.88 per 1,000 of the population, and for the five years 1908 to 1912 0.91 per 1,000 ; the rate now for all Tuberculous disease mortality during the year 1913 is 1.15 per 1,000 of the population.

The following table shows the number of deaths from Tuberculosis and the rates per 1,000 of the population for the whole Administrative County in the ten years 1904-1913 :—

Area.	Tuberculosis.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Administrative County	No. of Deaths.	204	165	186	196	207	185	190	204	197	*
	Rate per 1,000	0.97	0.78	0.88	0.92	0.97	0.86	0.89	0.95	0.91	1.15

* This column includes deaths from all forms of Tuberculosis, and is not confined to Pulmonary Tuberculosis as in previous years.

The Tuberculosis death-rate varied in the Urban Districts from 0.37 per 1,000 of the population in Brackley Borough, to 2.83 per 1,000 of the population in the Raunds District.

In the Rural Districts the variation in this mortality was from 0.38 per 1,000 of the population in the Middleton Cheney District to 1.81 per 1,000 of the population in the Daventry District.

Arranged in the order of their Tuberculosis death-rates the Urban Districts stand thus :—

<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>	
Brackley Borough	... 0.37	Finedon	... ... 1.32
Rothwell	... ... 0.42	Daventry Borough	... 1.42
Desborough	... ... 0.71	Oundle	... ... 1.45
Higham Ferrers Boro'	1.08	Rushden	... ... 1.45
Irthlingborough	... 1.28	Kettering	... ... 1.51
Wellingborough	... 1.29	Raunds	... ... 2.83

The position of the Rural Districts in respect of their Tuberculosis death-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Middleton Cheney ...	0.38	Wellingborough ...	0.94
Oxendon ...	0.46	Oundle ...	0.99
Brackley ...	0.55	Northampton ...	1.21
Towcester ...	0.66	Easton-on-the-Hill ...	1.29
Brixworth ...	0.67	Gretton ...	1.31
Crick ...	0.84	Hardingstone ...	1.32
Kettering ...	0.92	Potterspury ...	1.34
Thrapston ...	0.93	Daventry ...	1.81

Respiratory Diseases Mortality.—The mortality from these diseases in the County during the year 1913 amounted to 308, as against 339 in the year 1912, and an average of 345 for the ten years 1903 to 1912. The mortality for the first five of these years showed an average of 351, and for the second five years of 339. In the year 1913 the rate of mortality from the respiratory diseases was 1.42 per 1,000 of the population, as against the rate of 1.57 per 1,000 for the year 1912. Of the deaths which occurred, 120 belonged to the Combined Urban Districts and 188 to the Combined Rural Districts, after allocating to its proper district one death which occurred in Berry Wood Asylum. Of the total deaths from Bronchitis and Pneumonia (all forms), 32.46 per cent. were of children under 5 years of age ; of these, 42 or 42.0 per cent. were in the Combined Urban Districts, and 58 or 58.0 per cent, were in the Combined Rural Districts.

It will be seen from the foregoing figures that the rate of mortality from respiratory diseases during the year 1913 was of a favourable character, and it cannot be doubted that the more clement climatic conditions of the year than prevailed in 1912, had much to do with the bringing about of this result.

The following table shows the number of deaths from the

respiratory diseases, and the rate per 1,000 of the population for the whole Administrative County for the ten years 1904-1913.

Area.	Respiratory Diseases	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Administrative County	No. of Deaths	354	354	305	387	352	399	328	281	339	308
	Rate per 1,000	1.68	1.68	1.44	1.83	1.66	1.87	1.53	1.31	1.57	1.42

The death-rate for Respiratory Diseases varied in the Urban Districts from 0.37 per 1,000 of the population in Brackley Borough to 2.54 per 1,000 of the population in the Oundle District.

In the Rural Districts the variation in this mortality was from 0.70 per 1,000 of the population in the Oxendon District to 3.89 per 1,000 of the population in the Easton-on-the-Hill District.

Arranged in the order of their Respiratory death-rates the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Brackley Borough	... 0.37	Rushden	... ... 1.16
Raunds	... ... 0.51	Desborough	... ... 1.18
Wellingborough	... 0.79	Finedon	... ... 1.32
Rothwell	... ... 1.05	Higham Ferrers Boro'	1.44
Irthlingborough	... 1.06	Kettering	... ... 1.65
Daventry Borough	... 1.13	Oundle	... ... 2.54

The position of the Rural Districts in respect of their death-rates for Respiratory Diseases is as follows :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Oxendon	...	0.70	Thrapston	...	1.40
Northampton	...	0.86	Oundle	...	1.70
Brackley	...	1.11	Gretton	...	1.96
Brixworth	...	1.26	Daventry	...	2.17
Kettering	...	1.30	Middleton Cheney	...	2.71
Towcester	...	1.33	Hardingstone	...	2.92
Potterspury	...	1.34	Crick	...	2.97
Wellingborough	...	1.34	Easton-on-the-Hill	...	3.89

General Zymotic Mortality.—The total number of deaths of the chief notifiable zymotic diseases for the year 1913, and inclusive of those from Measles, Whooping Cough, Diarrhœa, and Enteritis, which are not notifiable diseases, but not including Cerebro-Spinal Meningitis, Poliomyelitis, Tuberculosis, Simple Croup, or Epidemic Influenza, amounted to 119, of which 53 deaths occurred in the Combined Urban Districts, and 66 in the Combined Rural Districts. The mortality-rate of 0.55 for the year 1913 compares very favourably with the average rate for the preceding ten years, which was 0.75 per 1,000 of the population.

Compared with more recent years, the general zymotic mortality rate for the year 1913 was 0.55 per 1,000 of the population, as against 0.61 per 1,000 in 1912, 1.17 in 1911, 0.48 in 1910 and 1909, and 0.70 in 1908. The mortality rate for the notifiable diseases exclusive of Tuberculosis, Cerebro-Spinal Meningitis, and Poliomyelitis amounted to 0.20 per 1,000 of the population, as against 0.22 in 1912, 0.29 in 1911, 0.20 in 1910, 0.25 in 1909, 0.22 in 1908, and 0.27 for the years 1907 and 1906. The total number of cases notified exclusive of Tuberculosis, Cerebro-Spinal Meningitis, and Poliomyelitis was 1,208, as against 1,259 in 1912, 1,339 in 1911, 1,066 in 1910, 1,224 in 1909, 1,064 in 1908, 1,240 in 1907, and 1,223

cases in 1906, which is at the rate of 5.60 cases per 1,000 of the population ; of these cases, 45 were fatal, as against 49 in 1912.

Of the total deaths from zymotic diseases 81 were of children under five years of age, or at the rate of 68.06 per cent. Of these, 36, or 44.44 per cent. were in the Combined Urban Districts, and 45 or 55.56 per cent, were in the Combined Rural Districts.

The following table shows the number of deaths from the general zymotic diseases, and the rate per 1,000 of the population for the whole Administrative County, for the ten years 1904-1913 :—

Area.	General Zymotic Diseases	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Adminis- trative County.	No. of Deaths.	203	195	176	135	150	104	103	252	132	122
	Rate per 1,000	0.96	0.92	0.83	0.63	0.70	0.48	0.48	1.17	0.61	0.55

The general zymotic death-rate varied in the Urban Districts from 0.00 per 1,000 of the population in the Irthlingborough and Oundle Districts to 1.99 per 1,000 of the population in Daventry Borough. In the Rural Districts the variation in this mortality was from 0.00 per 1,000 of the population in the Gretton District to 1.43 per 1,000 of the population in the Brixworth District.

Arranged in the order of their death rates for zymotic diseases the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>	
Irthlingborough	...	0.00	Rushden	...	0.65
Oundle	...	0.00	Brackley Borough	...	0.75
Finedon	...	0.26	Desborough	...	0.94
Higham Ferrers Boro'	0.36		Raunds	...	1.03
Kettering	...	0.36	Rothwell	...	1.27
Wellingborough	...	0.44	Daventry Borough	...	1.99

The position of the Rural Districts in respect of their death rates for zymotic diseases is as follows :—

	<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>	
Gretton	...	0.00	Wellingborough	...	0.47
Oxendon	...	0.23	Potterspury	...	0.57
Brackley	...	0.27	Towcester	...	0.57
Oundle	...	0.28	Middleton Cheney	...	0.77
Kettering	...	0.30	Northampton	...	0.86
Thrapston	...	0.37	Hardingstone	...	0.92
Crick	...	0.42	Easton-on-the-Hill	...	1.29
Daventry	...	0.43	Brixworth	...	1.43

SPECIAL ZYMOTIC DISEASES AND MORTALITY.

Small Pox.—On June 20th, 1913, a case of small-pox was diagnosed at Kettering. It was that of a girl, aged 16 years, who had contracted the disease on board ship coming from Brazil, and who arrived at Liverpool about a week previously to the discovery of her illness. It transpired, on enquiry, that she had sat at meal times next to a person who, on arrival at Liverpool, was found to be suffering from the disease, and she had been kept, therefore, under careful observation. The case was removed promptly to the small-pox hospital belonging to the Kettering Joint Hospital Board, and Dr. Allison, the Medical Officer of Health, took effective means to secure the isolation and vaccination of all who had been in contact with the girl during her stay in

Kettering. It is gratifying to know that the measures taken sufficed to prevent the spread of the disease.

Scarlet Fever.—During the year 1913, there were 803 cases of this disease in the Administrative County, as against 837 cases in 1912, and as against an average of 882 cases for the ten year period 1903-1912. Of the total cases which occurred during 1913, 501 belonged to the Combined Urban Districts, and 302 to the Combined Rural Districts. The total scarlet-fever prevalence was equal to a sickness rate of 0.37 per cent. of the population, as against 0.38 per cent. in 1912; in the Combined Urban Districts this rate amounted to 0.51 per cent., and in the Combined Rural Districts to 0.25 per cent. of the respective populations. The total number of deaths from this disease in the Administrative County during 1913 was 5, or 0.62 per cent. of the cases, as against 0.35 per cent. in 1912, and of these deaths, 3 or 60 per cent. were of children under five years of age.

Two districts escaped visitation by scarlet fever during the year, viz., Gretton and Potterspury Rural Districts, as against two districts enjoying similar freedom during the year 1912.

Slight though it was, the scarlet-fever prevalence of the last few years in the County showed some decrease in volume; but, as in past years so for 1913, the localities most chiefly affected were the Kettering and Rushden Urban Districts, and to a considerable extent also the Wellingborough Urban and Rural Districts. The character of the disease was mild, and its spread was attributable generally to the difficulty of detection in the earlier stages of infection. This was the case particularly in relation to children attending the public elementary schools.

BRACKLEY BOROUGH.—“ I am glad to report that Scarlet Fever has practically died out, only one case was notified. The house was disinfected by means of formalin spray as usual.”

DAVENTRY BOROUGH.—“ The origin of the Scarlet Fever cases was obscure—one occurred in February and was removed to the Sanatorium—the other three occurred during November in the same house and were treated at home.”

HIGHAM FERRERS BOROUGH.—“ Two cases of Scarlet Fever were notified during the year, one in January and the other in April, and in each case the disease was traced to a source outside the district.”

DESBOROUGH URBAN.—There were ten cases of Scarlet Fever; but “ no common source of infection could be discovered, although there was strong suspicion that in some instances the infection had been contracted in a neighbouring town where the disease had almost attained an endemic character.”

FINEDON URBAN.—The two cases of Scarlet Fever “ were of a very mild type, they were well isolated, and the disease did not spread.”

KETTERING URBAN.—There were 325 cases notified. “ Like previous years, the heaviest incidence of attacks have been in the months following the Christmas and summer holidays, and this has again been caused by missed cases and children being allowed to attend school when desquamating. . . . Six reports were submitted to the Council as to the desirability of proceedings being taken against parents for allowing children to go about in an infectious condition. Warning letters were sent in three instances, and proceedings were taken in one, and a conviction secured.”

RAUNDS URBAN.—“ The 14 cases of Scarlet Fever were generally of a mild type, and no deaths occurred from that disease. The cases were mostly one case in each house, and home isolation was so well carried out that there was no danger at any time of an epidemic.”

ROTHWELL URBAN.—There were 17 cases of Scarlet Fever. “ Fortunately, these cases were nearly all of a mild type, and “ not a single death occurred. In several instances the infec- “ tion was traced to Kettering, and no special cause in “ Rothwell was discovered for the outbreak.”

RUSHDEN URBAN.—“ Fifty-two cases of this disease were “ notified during the year as against ninety-eight in the “ 1912 report. . . No cases have been traced in origin to “ the food or milk supply. . . One death only resulted “ from complication following it.”

WELLINGBOROUGH URBAN.—“ Sixty-seven cases were “ notified, an increase of fourteen on 1912. The disease was “ of a very mild type, and the mortality was nil. Many cases “ escaped detection until they were in the peeling stage, and “ no doubt many of these were responsible for spreading “ infection.”

BRIXWORTH RURAL.—“ 38 cases were notified during the “ year, as against 31 for 1912. . . No cause could be “ found for the origin of any of these cases. One death “ occurred at Spratton in a child who had only recently “ recovered from an attack of measles.”

DAVENTRY RURAL.—“ No case of this disease was notified “ during the first six months of the year, but towards the “ winter the disease became somewhat prevalent. The “ outbreaks in all the nine Parishes in which it occurred were “ of an exceedingly mild type, and to this I attribute the “ difficulty of dealing with it in some of the parishes.”

HARDINGSTONE RURAL.—“ Of the 31 cases of Scarlet Fever, “ 27 occurred in Denton. It was a very mild epidemic—so “ mild that that accounts for its spread, since the first cases “ were not recognised till the children were found to be “ peeling.” In one other case, a painter had been stripping

the wall paper in a house where there had been a case the year before, and the origin of the other cases was attributed to infection in Northampton.

KETTERING RURAL.—“Forty-eight cases of Scarlet Fever “ were notified, compared with 67 last year.” Nearly half of these occurred at Pytchley and Corby.

MIDDLETON CHENEY RURAL.—“There was a slight epidemic “ of Scarlet Fever at Middleton Cheney.”

NORTHAMPTON RURAL.—“Of the 23 cases of Scarlet Fever “ 15 occurred in our district and 8 at Berry Wood Asylum.” The chief part of the cases, including those at the Asylum, were due to the importation of infection; but the case at Weston Favell was probably due to infection from a non-notified case in a neighbouring cottage.

OUNDLE RURAL.—“Benefield—a village usually free from “ infectious illness—had an epidemic of mild Scarlatina. I “ never could discover how it was brought into the place “ though careful search was made for some undetected case.”

THRAPSTON RURAL.—At Thrapston “ a few cases of Scarla- “ tina were seen, but the disease did not spread. . . . “ Cases of Scarlatina—eight in all—were seen at Slipton in “ September. . . Cases of Scarlatina were also seen at “ Stanwick, Ringstead, and Woodford, but they did not lead “ to any epidemic.”

TOWCESTER RURAL.—“Whittlebury and Towcester were “ the only places where there was Scarlet Fever, each had “ 3 cases. Bearing in mind the prevalence of the disease, we “ have cause for thankfulness.”

WELLINGBOROUGH RURAL.—“Scarlet Fever was nearly “ as prevalent in 1913 as in the former year, there being a

“ total of 50 cases against 54 in 1912. The parish of Wollaston
 “ has had something of the nature of an epidemic of this
 “ disease. . . . There is a doubt as to where the first cases
 “ of the epidemic caught the infection, but these cases were
 “ very mild and were not discovered until they were well into
 “ the peeling stage, by which time the damage had been done
 “ and infection was spread right and left. . . . There
 “ is a strong suspicion that the cases at Bozeat and Ecton
 “ were infected from Wollaston.”

Diphtheria and Membranous Croup.—The total number of cases during the year 1913 amounted to 234, as against 261 in 1912. On examination of the notifications of the disease, it is found that 177 or 75.64 per cent. of the cases belonged to the Combined Urban Districts and 57 or 24.36 per cent. to the Combined Rural Districts. The case incidence on the Combined Urban population was at the rate of 1.82 per 1,000 of the population, as against 1.43 per 1,000 in 1912, and on the Combined Rural population 0.47 per 1,000 of the population, as against 1.02 in 1912. In the Combined Urban Districts during 1912 there were 14 deaths, and in the Combined Rural Districts there were 16 deaths. The comparative severity of the cases is shown by the mortalities, which give a death-rate of 7.90 per cent. of the cases in the Combined Urban Districts, as against 10.07 per cent. in 1912 ; of 28.07 per cent. in the Combined Rural Districts, as against 13.93 per cent. in 1912 ; and of 12.82 per cent. in the whole Administrative County, as against 11.87 per cent. in 1912. No cases of diphtheria or membranous croup were notified in the Boroughs of Brackley and Daventry or in the Irthlingborough Urban District, or in the Crick, Easton-on-the-Hill, Middleton Cheney, Oxendon, and Thrapston Rural Districts.

I am glad to be able to note some slight decrease in the prevalence of diphtheria during the year 1913, though this was due only to the large reduction in the rural districts. The locality mainly responsible for the high rate of the disease

in the urban districts was Kettering, where the disease often appears to have been escaped detection in the early stages, and where, as the report of the Medical Officer of Health shows, a large number of defective house-drains were found to be in existence at the houses of patients.

HIGHAM FERRERS BOROUGH.—“ Two cases of diphtheria occurred in different houses in Spring Gardens—one in May and the other in July. As it was improbable that there had been direct infection from one patient to the other, the drainage of the houses in the row was investigated and certain defects found. These have now been remedied, and no more cases have occurred.”

DESBOROUGH URBAN.—In regard to the 5 cases notified, there was no evidence of the sufferers having been in contact with one another, but the discovery of defective house-drain ventilators, insufficient sewer ventilation, and the dryness of the weather then prevailing, were in my opinion factors which promoted the occurrence of the cases in question.”

FINEDON URBAN.—The two cases of diphtheria “ occurred in the van of a travelling showman, and were imported from outside the district. One of the cases unfortunately proved fatal.”

KETTERING URBAN.—There were 124 cases notified. The schools undoubtedly had something to do with the spread of this disease; e.g., one girl attended Rockingham Road School, whom the teacher sent home, and the doctor notified the case the same day. Another girl attending Park Road School was notified on Feb. 2nd, 1913. The previous day she was at school, and was allowing other children to look at her throat. . . . The defects found at those houses where diphtheria occurred have been numerous, and entailed a large amount of extra work on your Inspector.

Such defects amounted to 190, and were mostly in connection with drainage.

ROTHWELL URBAN.—With regard to the 16 cases of diphtheria, “in every case most careful investigation was made as to the cause, but nothing definite could be discovered. The Gladstone Street and Victoria Street Infant Schools were closed from January 28th till February 10th, to allow them to be thoroughly disinfected, as a good number of the cases in January occurred amongst children attending those schools.”

RUSHDEN URBAN.—There were ten cases of this disease. “There would appear to be some sort of relationship between the number of cases of this disease notified and the incidence of Scarlet fever.”

WELLINGBOROUGH URBAN.—“There were sixteen cases of diphtheria, an increase of one on the previous year, but there have been no deaths. Five of the cases were traced to infection at one of the schools. The school was thoroughly disinfected, and all cases of doubtful sore throat were excluded with the result that no further notifications were received from that source. The other cases appeared sporadically, and in most instances the only probable source of infection appeared to be defective drains.”

BRACKLEY RURAL.—“Regarding diphtheria I have already expressed the opinion that no child should be allowed to return to school until a month after being taken ill, and only then if evidence had been produced of absence of the specific organism after two bacteriological examinations of swabs taken from the throat and nose at intervals of seven days.”

BRIXWORTH RURAL.—There were 12 cases of diphtheria, seven of these were notified from Boughton; the outbreak,

“ which began in September, 1912, and was not abated till
 “ July, 1913, was of a very severe type and probably one of
 “ the worst outbreaks we have had since the one that occurred
 “ at Spratton 11 years ago. The causes of the outbreak
 “ were—(1) Seven of the school children were found to be
 “ diphtheria carriers. These children were excluded from
 “ school until their throats were proved to be healthy again.
 “ (2) A well outside Mr. Muggleton’s was found to be con-
 “ taminated. This well was accordingly closed.” In the
 case at Brixworth, “ the cause was probably due to defective
 “ sanitary arrangements in the up-stair water closet. No
 “ definite cause could be found for the diphtheria in the other
 “ villages.”

DAVENTRY RURAL.—Three cases occurred on a canal boat
 at Braunston. “ They arrived at Braunston ill, having
 “ contracted the disease outside our district.” In the two
 cases at Long Buckby, and the three at Newnham, “ drainage
 “ defects were found and attended to.”

GRETTON RURAL.—“ In the case of diphtheria, the in-
 “ fection was probably imported from the Uppingham Rural
 “ District.”

HARDINGSTONE RURAL.—“ The two cases of diphtheria
 “ were again isolated cases at Castle Ashby and Yardley
 “ Hastings, and there were no further cases, neither could I
 “ trace their origin.”

KETTERING RURAL.—Seven cases were notified, with two
 deaths; but their origin was not accounted for.

NORTHAMPTON RURAL.—Three cases were notified at
 Weston Favell and Buttocks Booth. “ It is difficult to
 “ account for the origin of these isolated cases, but a very
 “ large number of cases of sore throat and diphtheria are
 “ prevalent in Northampton just now.”

OUNDLE RURAL.—“ Two cases of diphtheria were seen at “ Woodnewton—one in April and the other in June.” The origin of these cases was not discovered.

POTTERSPURY RURAL.—The three cases “ were of mild “ type and were all resident at Paulerspury.”

TOWCESTER RURAL.—“ Of the 8 cases notified, 5 were at “ Blisworth, and two of these on a barge ; there was one case “ at Cold Higham and 2 at Eastcote.”

WELLINGBOROUGH RURAL.—Six of the ten cases were at Wollaston, “ which is to be expected, as it is often found that “ Diphtheria and Scarlet fever are prevalent at the same time. “ Defective drainage seemed to have had something to do “ with the cases at Irchester, while in the case at Earls Barton “ it was found that the patient had been drinking water from “ a well, which had been condemned and closed, although “ the town water was laid on to the premises.”

Enteric Fever.—The number of cases of this disease in the County during the year amounted to 47, of which 20 occurred in the Combined Urban Districts and 27 in the Combined Rural Districts. The total number of deaths from the disease was 8 as against 3 in 1912 ; of these, two belonged to the Urban Districts, giving a rate of 10 per cent. of the Urban cases, and 6 to the Rural Districts, giving the rate of 22.22 per cent. of the Rural cases. The Combined death-rate for the Administrative County was 17.02 per cent. of the total cases, as against 11.11 per cent, in the year 1912. The Boroughs of Brackley, Daventry, and Higham Ferrers, with the Desborough, Finedon, Oundle, and Rothwell Urban Districts, and also the Brackley, Crick, Daventry, Easton-on-the Hill, Gretton, Middleton Cheney, and Oxendon Rural Districts were all free from this disease in 1913.

Though there were 20 more cases notified in 1913 than in the year 1912, there was no epidemic of the disease, and cases occurred in only five of the twelve Urban Districts of the County. The recurrence of enteric fever at Potterspury has I am glad to say, led to a reconsideration of the need of that place for an independent supply of water, and I hope that, when this is in working order, its influence will be shown in the non-occurrence of cases in that village. The cases which occurred at King's Cliffe in the Oundle Rural District only go to emphasise the oft-reported need of that place for efficient water-supply, and now that this has been supplied it is to be hoped that it will be duly appreciated.

IRTHLINGBOROUGH URBAN.—“ The two Typhoid cases were “ of a mother and child in Lilley Terrace. No local cause could “ be assigned, as the town water was used, and the drains “ were in good order. The only possible explanation lay “ in the fact that both ate some water-cress gathered from a “ brook, some weeks prior to the onset of the disease.”

KETTERING URBAN.—Fourteen cases were notified during the year. The sources of some of these could not be determined; but one case was probably imported, another was connected with defective drainage, and three patients had been eating water-cress.

RAUNDS URBAN.—“ The enteric-fever case was no doubt “ imported.”

RUSHDEN URBAN.—“ One case only was reported during “ the year. . . . The origin of it has not been traced, and “ no other case arose.”

WELLINGBOROUGH URBAN.—“ Two cases of typhoid fever “ were notified, one of which proved fatal. The source of “ infection was somewhat doubtful, but in both instances

“ the drains were found to be very defective and have since
“ been remedied.”

BRIXWORTH RURAL.—“ Two cases were notified as against
“ one for 1912. The cases occurred at Moulton and Pitsford.
“ No cause could be found for the case at Moulton. The case
“ at Pitsford was undoubtedly due to defective sanitary
“ arrangements.”

HARDINGSTONE RURAL.—Of the three cases of enteric
fever, “ the first was a very slight case at Hackleton, for which
“ no cause could be found. The second was a very severe
“ and fatal case, at Denton, in a comparatively elderly
“ woman; she attributed her illness to the fact that they
“ had lately been cleaning out a very foul midden next door.”
The third case was of a boy at Piddington, and evidence
pointed to a leakage from the village sewer into the well
from which he drank.

KETTERING RURAL.—Three cases occurred; one at
Pytchley seemed to be associated with a blocked drain, but
the origin of two at a school at Geddington could not be
discovered.

NORTHAMPTON RURAL.—There was one case of enteric
fever in a man who “ had been working on the railway away
“ from home till he was taken ill.”

OUNDLIE RURAL.—Three cases occurred at King's Cliffe,
“ which had no connection with one another. . . They
“ were the only cases in the district, and their occurrence
“ does not indicate a good sanitary condition.”

POTTERSPURY RURAL.—“ The enteric fever cases occurred
“ in the autumn at Potterspury and in every case contam-
“ inated water was the cause.”

THRAPSTON RURAL.—In connection with a case of enteric fever at Aldwinckle Rectory in June, there was “ a well close “ to the house known to be polluted (an analysis confirmed “ this) but not supposed to be used for drinking purposes ; “ but still there was access to it. . . . The well at the house “ is now closed.”

TOWCESTER RURAL.—“ The 3 cases of enteric fever were “ in one family at Towcester. It was not possible to determine “ how the first case was contracted.”

WELLINGBOROUGH RURAL.—Of the five cases, three “ occurred at Irchester and two at Earls Barton. Four of “ these cases occurred early in the year during my prede- “ cessor’s term of office, and I have no information on the “ probable source of infection. The other case occurred in “ October and ran a very mild course. No obvious source “ of infection was discovered.”

Puerperal Fever.—The total number of cases of puerperal fever was 7 for the year 1913, as against the same number for 1912. The number of deaths was 3. With regard to the cases which occurred during the year, 1 was in the practice of a certified midwife or at the rate of 0.54 per 1,000 of the births attended by the midwives. I am glad to be able to report, however, that no blame was attached to the midwife in respect of this case.

Erysipelas.—The number of notified cases of erysipelas in the County during the year was 109, as against 113 in the year 1912. In the Combined Urban Districts there were 52 cases, but no death, and in the Combined Rural Districts 57 cases and 1 death. The percentage case mortality, therefore, for the Combined Urban Districts was 0.00 as against 1.92 in 1912, and for the Combined Rural Districts 1.75, as against 8.19 in the preceding year. For the whole of the Administrative County, the mortality was 0.91 per cent. of

the cases, as against 5.30 per cent. in 1912. These are more satisfactory rates than I have been able to report for several years past.

Measles.—The mortality from this disease in the County was shown in six Urban and five Rural Districts. There were 24 deaths in all, as against 32 in 1912, 16 in 1911, 26 in 1910, 30 in 1909, and 10 in 1908. The number of deaths for 1913 was, therefore, only slightly above the average of 22 for the five preceding years; but it will be seen from the following abstracts that the disease prevailed considerably throughout the County during the year.

DAVENTRY BOROUGH.—“ Very prevalent during April and May, necessitating school closure for several weeks. The disease was mostly of a mild type and some 180 cases occurred.”

HIGHAM FERRERS BOROUGH.—“ In June and July an epidemic of measles broke out, when the fatal case, previously mentioned, occurred.”

DESBOROUGH URBAN.—“ Measles prevailed extensively during the month of July, but fortunately there was no death to report as the result of this malady.”

ROTHWELL URBAN.—“ Measles of a very mild type was very prevalent in May. . . . One death occurred from this disease.”

RUSHDEN URBAN.—“ An epidemic was started from an imported case or cases in the early autumn, and gradually spreading from one district to another until all the Infant Schools except one were closed for a period. . . . There were six deaths in all, two under one year and four between one and two years.”

WELLINGBOROUGH URBAN.—“ Measles broke out in epidemic form in November. It was very prevalent in Rushden at that time, and no doubt spread from that district to Wellingborough. It first made its appearance in the infant department of Park Street Schools, and spread rapidly until all the Elementary Schools were affected.”

BRIXWORTH RURAL.—Measles were very prevalent in nine villages.

DAVENTRY RURAL.—Outbreaks of measles occurred in eight parishes. “ Two deaths were registered from this cause, one in Long Buckby, and one in Norton.”

HARDINGSTONE RURAL.—An epidemic of measles occurred in the early part of the year at Hackleton.

KETTERING RURAL.—“ Very few cases were reported.”

NORTHAMPTON RURAL.—Measles were prevalent at Billing and Heyford.

OUNDLE RURAL.—“ Measles was prevalent in Lutton in January.”

TOWCESTER RURAL.—Measles was epidemic at Wappenham, Blakesley, and Pattishall during the early part of the year.

Whooping Cough.—The total number of deaths from this disease during the year 1913 amounted to 15, as against 24 in 1912, 48 in 1911, 25 in 1910, 8 in 1909, and 75 in 1908. The rate of mortality was, therefore, considerably below the average of 36 for the preceding five years. In regard to the deaths for the year 1913, 4 occurred in the Combined Urban Districts, and 11 in the Combined Rural Districts, all except one—in Brackley Borough—being of children under 5 years of age. Epidemics were noted as having occurred in the

Oundle Urban District, and at Creton and Braybrooke respectively in the the Brixworth and Oxendon Rural Districts.

Chicken Pox.—The only cases of this disease which were notified were 7 in the Hardingstone Rural District, and only one death—in the Daventry Rural District—is shown on any of the mortality tables from this cause; but some mention is made of slight outbreaks of the disease in the other following named Districts:—Desborough and Finedon Urban and Oxendon Rural.

Diarrhœa and Enteritis.—There were 33 deaths recorded under this heading for the Administrative County during 1913, as against 27 deaths in 1912, 124 deaths in 1911, 8 deaths in 1910, 12 deaths in 1909, and 17 deaths in 1908.

These deaths were all under two years of age, and do not represent an excessive mortality.

Influenza.—There was rather more prevalence of epidemic influenza during 1913 than for preceding years, but the mortality was again fairly low. Twenty-six deaths occurred, as against 24 deaths in 1912, 16 deaths in 1911, 36 deaths in 1910, 57 deaths in 1909, and 49 deaths in 1908. All the deaths, with the exception of one in Brackley Borough and one in the Easton-on-the-Hill Rural District, were of persons above five years of age. Of the total deaths, 9 occurred in the Combined Urban Districts, as against 3 in 1912, and 17 occurred in the Combined Rural Districts, as against 21 in 1912.

Poliomyelitis.—Only one case of this disease was notified, in the Kettering Urban District. One death, however, occurred from this disease in the Oundle Rural District. The Kettering case was “a girl aged four years. She had “a very high temperature. Congestion of the throat was “the first symptom noticed. For 14 days she was very ill,

“ but gradually began to mend. The attack, however, has
“ affected her left hand severely, and right leg slightly.”

Cerebro-Spinal Meningitis.—Two cases of this disease were notified—one in the Kettering Urban District, and one in the Thrapston Rural District. Both cases unfortunately ended fatally. The following particulars are given:—

KETTERING URBAN.—“ One case was notified. It occurred
“ in a child under one year.”

THRAPSTON RURAL.—“ On December 16th, a child, aged
“ five, living near Great Addington, was taken ill at school,
“ and was seen next day by a medical man, who diagnosed
“ the case as Cerebro-Spinal Meningitis. The child died the
“ same day after eighteen hours’ illness. I received the report
“ of the death and the notification by the same post. The
“ home of the child was an isolated farmhouse in fairly good
“ condition, but the Sanitary Inspector reported that the
“ drains were defective. No other case of illness was reported
“ from the school.”

SUPERVISION OF MIDWIVES.

One case of Puerperal fever occurred in the practice of the certified midwives during the year 1913, as against four and three respectively in the two preceding years 1912 and 1911; the case unfortunately proved fatal. The number of confinements attended by the midwives was 1,837 of which 38 were still-births, as against 1,906 confinements and 52 still-births in 1912, and as against 1,894 confinements and 34 still-births in the year 1911. The midwives were responsible therefore, for 41.8 per cent of the total registered births in the County for the year, as against 43.4 per cent. in 1912, and 42.5 per cent. in 1911. In respect of the confinements attended by them, the midwives sent for medical aid in 123 instances, or at the rate of 6.6 per cent., and as against 8.9

PARTICULARS AS TO EQUIPMENT AND EFFICIENCY OF MIDWIVES AT THE END OF THE YEAR 1913.

	MIDWIVES.			REQUIREMENTS.																CONDITION AS TO CLEANLINESS.						EDUCATION.				ABILITY TO						
				Number of Midwives provided with.																																
	Washing Dresses and Aprons.		Bag of Appliances.				Forms.			Case Books.				Person.			Home.			Read Thermometer.		Take Pulse.		Pass Catheter.												
																										How kept.			How kept.							
	Total No. on Register.	No. Practising.	No. Not practising or without cases in 1913.	Yes.	No.	Fully Equipped.	Partially equipped.	Nil.	Well.	Moderate.	Bad.	Yes.	Medical help only.	No.	Yes.	No.	Well.	Moderate.	Bad.	Not at all.	Clean.	Fair.	Dirty.	Clean.	Fair.	Dirty.	Good.	Fair.	Poor.	Illiterate.	Yes.	No.	Yes.	No.	Yes.	No.
Midwives residing in the Administrative County ...	110	105	5	110	—	110	—	—	108	2	—	110	—	—	110	—	108	2	—	—	107	3	—	107	3	—	65	5	12	28	109	1	84	26	74	36
Midwives residing in ad- joining Counties, and in Northampton County Borough, but practis- ing also in County Area	7	7	—	7	—	7	—	—	7	—	—	7	—	—	7	—	7	—	—	—	7	—	—	7	—	—	4	—	1	2	7	—	4	3	4	3
TOTALS ...	117	112	5	117	—	117	—	—	115	2	—	117	—	—	117	—	115	2	—	—	114	3	—	114	3	—	69	5	13	30	116	1	88	29	78	39

per cent. in the year 1912; the cases in which medical assistance was asked for are shewn in the following table of causes due to:—

LABOUR—						Totals.
Deformed Pelvis	...	...	...	...	...	1
Breech Presentation	...	...	...	...	...	3
Face Presentation	...	...	...	...	...	1
Transverse Presentation	...	...	...	...	...	3
Funis Presentation	...	...	...	...	...	1
Impacted Head	...	...	...	...	...	5
Ante-Partum Hæmorrhage	...	...	...	...	...	1
Post-Partum Hæmorrhage	...	...	...	...	...	3
Placenta Praevia	...	...	...	...	...	1
Instrumental Labour	...	...	...	...	...	4
Obstructed Labour	...	...	...	...	...	2
Prolonged Labour	...	...	...	...	...	12
Retained Placenta	...	...	...	...	...	2
Adherent Placenta	...	...	...	...	...	7
Cardiac Weakness	...	...	...	...	...	1
Abortion	...	...	...	...	...	1
Uterine Inertia	...	...	...	...	...	2
Rigid Cervix	...	...	...	...	...	3
Ruptured Perinæum	...	...	...	...	...	11
Eclampsia	...	...	...	...	...	1
Occipital Posterior	...	...	...	...	...	1
Exhaustion	...	...	...	...	...	2

LYING-IN—

High Temperature	...	...	...	...	...	13
Diarrhœa	...	...	...	...	...	1
Puerperal Mania	...	...	...	...	...	1
Pleurisy	...	...	...	...	...	1
Unsatisfactory condition of mother	...	...	...	...	...	1

NEWLY-BORN CHILD—

Convulsions	...	...	...	...	...	...	2
Inanition	...	...	...	...	...	...	12
Premature Births	...	...	...	...	...	...	10
Congenital Debility	...	...	...	...	...	...	3
Still-births (to certify)	...	...	...	...	...	...	1
Ophthalmia	2
„ (slight)	3
Congenital Malformation	1
Talipes	2
Weak Heart	1
Nævus	1

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Three deaths of infants, as against five in the year 1912, occurred in the practice of the midwives before the arrival of medical assistance, and inquests were held in respect of two of these. Inquests were also held on the bodies of two women who died before medical assistance could be obtained, but no blame was attributed, in any of the cases, to the midwives in attendance. Notifications from midwives of having prepared or assisted to prepare for burial seven dead bodies were received during the year.

130 midwives notified their intention of practising in the County during 1913, as against the same number in 1912. Of these, six only acted temporarily, 4 removed from the County, one had her name removed from the Roll at her own request, owing to old age, etc., one died, and one has ceased practising for the present. The total number on the register at the end of the year was therefore 117, as against 116 in 1912; of the former number, 38 were district nurses. Of 70 other certified midwives resident in the County during the year, 7 were engaged in public institutions, 10 have retired from practice (including 2 who had their names removed from the Roll at their own request), one has left

the County, one has died, and 51 (including 5 district nurses) have no intention of practising at present as midwives. 64 of the practising midwives are certified on the ground of having been in bonâ-fide practice for twelve months before the passing of the Midwives Act, 1902.

Two women, who had been awarded midwifery scholarships by the Education Committee, were successful during the year in passing the examination of the Central Midwives Board ; both have since been practising, one at Long Buckby and neighbourhood and the other at Kettering. These women were trained under the auspices of the Association for Promoting the Training and Supply of Midwives, and under the terms of their scholarships they are obliged to practise in the Administrative County of Northampton for the first three years after becoming certified. The total number of inspections made by the Inspector of Midwives during the year 1913 was 480.

670 of the cards on " Advice to Mothers on the Management of their Infants " were given out from the office or by the Inspector of Midwives during the year.

Miss Kingham has reported specially to me on the equipment and efficiency of the midwives, and the particulars are summarised in the annexed table.

MISS KINGHAM has reported to me further as follows :—

The number of untrained midwives is decreasing in the County, and in some instances they will be very hard to replace, as there is not a living to be obtained from Midwifery alone in the smaller villages. Though not used to technical terms, it astonishes me very often the amount of practical knowledge they possess, and the self-reliance they show. Most of them always welcome being shown and told better methods than their own, though, of course, some of them are quite illiterate and think the Midwives Act all fuss, but they nevertheless endeavour to comply with the rules. In order

to keep the midwives up to a satisfactory standard of cleanliness in their work it is necessary to constantly visit them, and I have often been surprised at the remissness of some of the better trained midwives unless one is regularly looking after them.

The untrained Midwives now begin to understand that they are recognised by the State, and, as such, have a duty to perform. They certainly have a good deal of self-esteem, and it is a pleasure to see the continued improvement both in their personal cleanliness and surroundings. I have had to speak to one Sanitary Inspector of the condition of a Midwife's cottage, but he said if he condemned it there would be nowhere for the woman to live, as there was such a shortage of cottages. I take every opportunity of going to cases with the Midwives to watch them do their work, and they are particularly grateful for hints as to mother and baby. I also go without them, and see that their work is done satisfactorily. They still retain many old-fashioned notions: one Midwife informed me that she always found that by taking a red-hot coal out of the fire and putting it in a little hot water, which she then strained through a piece of muslin, cleansed the baby internally and took away the pain. Of course, I told her a little boiled sugar-water would answer the same purpose without the "Cinder-tea," and would relieve the pain of hunger until its natural food came.

The influence of the Insurance Act on the Midwives' work has in most cases been an advantage. Their fees have been raised, and there is not the uncertainty in their obtaining payment, as formerly existed. I have found in a district here and there that the doctor has raised his fee to £2 2s. when called in to the assistance of the midwife.

There has been no trouble this year with uncertified women acting as midwives, but I fear the cases of Puerperal Fever that arise are very often due to the 'handy woman' who assists the doctor, as she has no supervision, and is not always

careful as to dress and antiseptics. I find that the doctors are glad to take advantage of the midwife to assist them, as they know they will thereby secure cleanliness; as a matter of fact in one village in the County one doctor refused to attend any case unless the midwife was engaged too. An important addition to the National Insurance Act is made by the amending Act of 1913. Under this Act, the married woman worker is entitled to receive an additional maternity benefit, instead of sickness benefit as hitherto, but societies and committees are required to make satisfactory rules prohibiting any woman, receiving such maternity benefit in respect of her own insurance, from engaging in remunerative work during a period of four weeks after her confinement.

It will be well to urge upon the mothers in this County the great importance of this provision, as it will undoubtedly make for the better condition of health of insured mothers of the working class, and the midwives can do much in this direction.

Five records of cases of Ophthalmia were received at the office—3 slight and 2 severe. I made a thorough investigation of these, and called on the Medical Attendants of the 2 severe cases, and found they were due to the condition of health of the mothers, and not to neglect at birth. Every precaution was taken in each of the five cases. The vital importance of care at birth of children's eyes is brought to the notice of midwives at every inspection.

The breast-feeding of infants shows only a fractional decrease as compared with the year 1912, as out of 1,799 live births occurring in the practice of the midwives 1,742 were breast-fed, while the midwife was in attendance, being at the rate of 96.8 per cent, against 97.1 per cent. in 1912, and I have reason to believe that through the visits of the Health Visitors this natural feeding was continued in many of the cases up to the specified time.

Of the 1,837 births attended by the midwives, 997 were boys and 840 girls: the sets of twins numbered 25.

SCHOOLS.

The following extracts, from the reports of the Medical Officers of Health, set forth in some detail the amount of school-closure, which was considered desirable during the year on account of the prevalence of particular infectious diseases. The amount of such closure was not exceptionally large, and it is very evident that much discretion is exercised in most of the districts of the County. The sanitary conditions of the schools generally receive attention and appear to be satisfactory.

BRACKLEY BOROUGH.—“The condition of the Public Elementary Schools is excellent.”

DAVENTRY BOROUGH.—In regard to the new buildings of the Public Elementary Schools. “Abbey Schools opened for use November 13th; Council Schools, December 1st.”

DESBOROUGH URBAN.—“The Public Elementary Schools were visited from time to time, and on all occasions their sanitary condition was found to be satisfactory.” The Council Infants’ School was closed on account of the outbreak of measles on the School Medical Officer’s certificate.

IRTHLINGBOROUGH URBAN.—“The sanitary conditions and water supply of the schools are satisfactory. Better lavatory accommodation (wash-hand basins) is required in the Church of England School.”

KETTERING URBAN.—I regret that, owing to the serious illness of the Medical Officer of Health, it has not been possible for his report as School Medical Officer to be completed concurrently with his other Annual Report. It will be issued

at a later date, and the facts duly noted for future reference. He states, however, that “ the Open Air Recovery School “ was completed and opened in September last, and already “ signs of improvement amongst a number of the children are “ manifest.”

RAUNDS URBAN.—Good progress was being made in the erection of New Council Schools, and the Church of England Schools “ now stand modernized and thoroughly equipped “ both as regards sanitary conditions and educational purposes.”

ROTHWELL URBAN.—In addition to the closure of schools on account of diphtheria, already mentioned under the heading of that disease, “ the Church Infant School was closed from “ May 1st to May 15th, and the Grammar School from May “ 8th to May 15th,” on account of the prevalence of measles.

RUSHDEN URBAN.—The Schools generally appear to be satisfactory, some undergoing reconstruction. “ All the “ schools have been disinfected at such intervals as have been “ necessary during my jurisdiction. All the infant departments, with the exception of Moor-road, have been closed “ for a period of not less than three weeks during the last “ two months of the year owing to an epidemic of measles.”

WELLINGBOROUGH URBAN.—In consequence of the epidemic of measles, “ all the infant schools were closed a week “ before the Christmas holidays began. Over 100 cases “ were notified by the school teachers alone.”

BRACKLEY RURAL.—“ The sanitary condition of the Public “ Elementary Schools is satisfactory. Their water supply “ is from the shallow wells above mentioned, and the excrement is disposed of by means of middens, which are “ kept in good order.”

BRIXWORTH RURAL.—Schools were closed in nine villages for some weeks on “ account of measles, and at Creaton “ because of whooping cough.”

CRICK RURAL.—“ The Crick Schools are still being used. “ Although improvements have been made in the sanitary “ arrangements, the ventilation of the class-rooms is very “ bad. Negotiations are being made for the erection of new “ schools.”

DAVENTRY RURAL.—Schools were closed in seven parishes on account of measles, and in one on account of scarlet fever.

HARDINGSTONE RURAL.—The schools at Hackleton were closed for six weeks on account of measles, and at Denton for three weeks on account of scarlet fever.

KETTERING RURAL.—Some children at Pytchley were excluded from school on account of scarlet fever. “ The “ small epidemic then ceased.”

MIDDLETON CHENEY RURAL.—“ The sanitary condition “ and water supply of the schools appear satisfactory. At “ Middleton Cheney and Aston-le-Walls the schools were “ closed for a short time owing to scarlet fever and influenza.”

NORTHAMPTON RURAL.—Schools were closed at Duston “ for one month on account of mumps,” at Billing “ for one “ month for measles,” and at Heyford “ for six weeks in “ April for measles and for a fortnight in October for scarlet- “ fever.”

OUNDLE RURAL.—The school at Benefield was closed for a month on account of scarlet fever, and for the same period at Lutton because of measles.

OXENDON RURAL.—In regard to the schools, “ their

“sanitary conditions and water supply are satisfactory. School closure was found necessary at Braybrooke on account of whooping cough.”

POTTERSPURY RURAL.—“The sanitary condition of the various schools is satisfactory.”

THRAPSTON RURAL.—Children from Slipton, attending Twywell School, “were kept at home for six weeks” on account of the prevalence of scarlet fever at Slipton, and so the closure of the school at Twywell was avoided.

TOWCESTER RURAL.—“The following schools were closed during the year, viz., Wappenham, 5 weeks in January and February. Blakesley, 54 days in February and March. Pattishall, 3 weeks in March. The cause in each case being Measles.”

WELLINGBOROUGH RURAL.—The alteration of sanitary conveniences at the schools at Wollaston and Ecton is being undertaken. “During 1913 there was only one school closure, viz., at Ecton. Owing to the presence of scarlet fever in the vicinity, and general illness, these schools were closed early in December until the third week in January, 1914.”

ISOLATION HOSPITALS AND DISINFECTION.

Some progress has been made, in increasing the amount of Isolation Hospital accommodation, by the completion of small hospitals for the Brixworth and Daventry Rural Districts, and in the prospective enlargement of the hospital belonging to the Oundle Rural District for joint use with the Oundle Urban District. The question of isolation accommodation in other districts is still in abeyance. Especially was the scheme for the provision of a joint hospital for the Rushden and adjoining Urban Districts, revived during the

year by the Local Government Board, unfavourably received by the Councils interested. Neither was any further progress made in the discussion of the subject of accommodation by the Thrapston Rural District Council. The matter, however, to which attention has been called so often, and the response to which has left so much to be desired, is the want of efficient disinfectors in such Urban Districts as Rushden, Irthlingborough, Desborough, Rothwell and others, as well as in some of the Rural Districts. I am glad to note that a steam disinfecter has been provided now for the Wellingborough Urban District; but I think that pressure should be brought to bear on all those Urban District Councils, at present without the means for steam disinfection, to remedy that flaw in their administration with the least possible delay.

I need not dilate on this subject now further than to say that I hope to present a special report to the County Council during the current year, on the subject of Isolation Hospitals in this County and their equipment, similar to that which I drew up in the year 1899, and which will show the progress made since that date.

BRACKLEY BOROUGH.—“ There is no Isolation Hospital “ in the district.”

DAVENTRY BOROUGH.—“ The Borough is supplied with an “ Isolation Hospital (sanatorium) for infectious cases, situated “ about 1 mile from the town and providing adequate accom- “ modation for 16 patients (or more if necessary). . . It “ is desirable that the Sanatorium be supplied with an efficient “ means of disinfecting bedding, clothing, &c., and I again “ strongly recommend that a disinfecting apparatus be pro- “ vided.”

DESBOROUGH URBAN.—“ An Isolation Hospital for the “ reception and treatment of infectious diseases, and apparatus

“ for the effective disinfection of bedding and clothing,—at
 “ present wanting,—would have proved of invaluable service
 “ in the cases of scarlet fever and diphtheria dealt with during
 “ the year. It is to be hoped that some mutual arrangement
 “ for the provision of these requirements will be made at an
 “ early date between this and the neighbouring district of
 “ Rothwell.”

IRTHLINGBOROUGH URBAN.—“ There is no hospital for
 “ infectious diseases in the district. Representations have
 “ been made to the Council by other Local Authorities for
 “ an opinion as to the need or expediency of erecting a joint
 “ Hospital. The scheme was not favourably considered.”

KETTERING URBAN.—“ The Public Disinfecting Station . .
 “ is now being completed, and the plant will very shortly
 “ be in working order.” The Hospital is a joint one with the
 Kettering Rural District, and, “ after the inquiry held in
 “ December, 1912, the Local Government Board decided that
 “ the Hospital during the past years had been overcrowded.
 “ I agree absolutely with the Medical Superintendent in
 “ his report that proper accommodation for the Nurses should
 “ be seen to at once. . . . I would suggest to your Authority
 “ to consider the question of further enlarging the hospital
 “ to 50 beds, and this might be discussed by the representa-
 “ tives of both Authorities.”

RAUNDS URBAN.—“ As the Hospital is in a rather inac-
 “ cessible place and too far out of reach, it has been proposed
 “ that it should in the near future be removed from its present
 “ position and reconstructed on higher and drier ground
 “ nearer to Raunds, so that if necessary it might at any
 “ moment be utilised. I believe that several suitable sites
 “ are available, and no doubt the removal of this Hospital
 “ will take place during the summer months.”

RUSHDEN URBAN.—“ At present none is available beyond

“ a wood and corrugated iron structure on the Bedford Road,
 “ which was erected about 21 years ago for the reception of
 “ small-pox patients during a small epidemic that occurred
 “ then.”

WELLINGBOROUGH URBAN.—At the Isolation Hospital,
 “ accommodation is only provided for scarlet fever cases,
 “ and is somewhat limited at that. There are two wards
 “ which will hold comfortably about sixteen patients, pro-
 “ vided they are all children. . . It is a matter for regret
 “ that no accommodation is provided for other infectious
 “ diseases. . . The small-pox hospital is situated outside
 “ the district, and is kept in good order. . . One great
 “ improvement was carried out during the year, viz., the
 “ installation of a Washington Lyons Steam Disinfector.
 “ This was the subject of a Local Government Board enquiry,
 “ and leave was obtained to get the necessary loan. Hitherto
 “ the only process of disinfection was fumigation with
 “ formalin, which is somewhat limited in its application.”

BRIXWORTH RURAL.—“ The Isolation Hospital was opened
 “ in June. It was first inhabited on August 4th, and from
 “ that date until the end of the year 20 cases have been under
 “ treatment, including 18 cases of scarlet fever, 1 of diphtheria,
 “ and 1 of typhoid fever. During the months of November
 “ and December both wards were full of scarlet fever. I
 “ should like to suggest that another small ward be added
 “ to the Hospital where one could put a case of diphtheria
 “ or typhoid, because at present the two wards available are
 “ entirely taken up by male and female cases of scarlet fever.”

DAVENTRY RURAL.—“ The new hospital is nearly ready
 “ for patients, and doubtless before these lines are printed
 “ the wards will be occupied.” The cottage adjoining, which
 has hitherto been used temporarily as a hospital, has been
 purchased for adaptation as an annexe.

EASTON-ON-THE-HILL RURAL.—“ The arrangement for the
“ disinfection of infected clothing and bedding is unsatis-
“ factory.”

HARDINGSTONE RURAL.—“ Sixteen cases of scarlet fever
“ have been treated in our Infectious Hospital during
“ the year. Thirteen of these came from our district and
“ three cases were admitted from the Northampton Rural
“ District.”

MIDDLETON CHENEY RURAL.—“ There is no Isolation
“ Hospital or any provision made for the public disinfection
“ of infected clothing.”

OUNDLE RURAL.—“ The new block of buildings for the
“ Oundle Rural and Urban Hospital will be commenced in
“ the Spring: everything is ready and the sanction of the
“ Local Government Board was obtained some months ago.”
The drainage at the Hospital was relaid during the year.

POTTERSPURY RURAL.—“ A portable disinfector is used
“ when occasion requires.”

THRAPSTON RURAL.—“ The question of providing an
“ Isolation Hospital has been again discussed, but without
“ any practical result. I would again urge upon your Council
“ the desirability of procuring a disinfector for clothes,
“ bedding, &c.”

TOWCESTER RURAL.—“ For disinfecting, the Authority
“ have a Thresh's Emergency Disinfector in which Formic
“ Aldehyde is used, and there is a vehicle in which to convey
“ it to any place where disinfection is required—this obviates
“ the risk attending the removal of articles to a fixed point,
“ which was formerly Towcester.”

WELLINGBOROUGH RURAL.—“ There is no infectious diseases

“ hospital in the district, and all infectious cases are nursed
“ at home.”

VACCINATION.

In accordance with custom, I give in tabular form a summary of the Vaccination Officers' returns for the years 1893 to 1912, together with one or two supplementary remarks, in connection with this subject, to be found in the reports of the Medical Officers of Health for districts within the County. I am glad to say that the records for the year 1912 show some arrest in the demand for exemption from vaccination on the ground of “ conscientious objection ” on the part of parents ; but the fact remains that far too general a demand for such exemptions continues to be a feature of the administration of Vaccination within this County.

KETTERING URBAN.—“ The returns for 1913 show an
“ increased number of successful vaccination certificates.
“ This, however, is explained by the case of imported small
“ pox, which occurred in June last. Free vaccination was
“ offered to the direct contacts, as well as indirect, and all
“ except two were vaccinated. . . . Seventy-seven persons
“ were vaccinated at that time, most of whom had not been
“ vaccinated before.”

BRIXWORTH RURAL.—“ Vaccination is still decreasing,
“ most of the parents getting exemptions for their children,
“ who will be in great danger should small pox break out.”

TOWCESTER RURAL.—“ I am indebted to the Vaccination
“ Officer for the information that there were during the year
“ 32 successful vaccinations and 138 ‘ conscientious ’ ob-
“ jections.”

WATER SUPPLY.

The year 1913 was a favourable one, in so far as climatic

ANALYSIS OF VACCINATION OFFICERS' RETURNS, 1893-1912.

UNIONS OF THE COUNTY OF NORTHAMPTON.	PERCENTAGES OF BIRTHS IN RESPECTIVE YEARS.																																			
	Certificates of "Successful Vaccination." (Col. 1).									Certificates of "Conscientious Objection." (Col. 2)							Not finally accounted for. (Col. 3)								Total Living Unvaccinated. (Col. 2 + Col. 3).											
	1893-97	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	1893-97	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	*	1893-97	1898-1902	1903-1907	1908	1909	1910	1911	1912	
BRACKLEY	39.1	51.3	68.9	50.0	36.2	23.3	18.9	21.6	30.0	10.7	13.6	31.3	45.2	48.7	52.1	59.7	47.4	47.7	30.8	9.2	11.1	12.9	22.9	24.3	12.7	16.7	49.3	41.6	22.8	42.4	58.1	71.6	76.4	72.4	64.1	BRACKLEY
BRIXWORTH	42.9	50.6	58.6	50.0	46.0	36.4	32.4	31.8	39.3	14.4	20.9	40.6	45.5	56.8	58.5	56.7	51.6	44.2	28.0	12.9	4.8	5.1	3.5	6.3	6.1	5.1	49.2	42.5	33.9	45.4	50.6	60.3	64.8	62.8	56.7	BRIXWORTH
DAVENTRY	51.1	56.9	64.3	44.9	40.8	36.0	29.6	26.9	35.6	15.0	18.4	39.9	43.0	53.5	49.5	56.7	48.5	36.3	19.8	10.5	9.4	10.4	5.2	12.5	11.9	9.8	39.4	34.8	28.9	49.3	53.4	58.7	62.0	68.6	58.4	DAVENTRY
HARDINGSTONE	38.5	48.9	47.2	28.4	27.6	26.2	18.4	17.2	23.5	34.4	41.0	59.9	64.3	66.3	76.8	76.1	68.7	42.7	8.2	4.3	3.7	1.8	2.1	2.1	2.4	2.4	51.1	42.7	45.3	63.6	66.1	68.4	78.9	78.8	71.1	HARDINGSTONE
KETTERING	1.6	17.3	28.5	17.6	13.4	12.7	12.6	10.1	13.2	21.4	51.9	71.5	76.3	77.8	77.7	81.3	76.9	84.2	47.7	10.2	2.9	2.4	2.6	3.4	2.1	2.6	84.2	69.2	62.1	74.4	78.7	80.4	81.1	83.1	79.6	KETTERING
NORTHAMPTON	3.7	16.6	24.8	20.3	18.0	16.9	16.3	14.5	17.2	31.4	56.4	66.5	68.5	70.7	70.6	76.2	70.5	74.2	39.8	10.1	6.9	5.8	5.2	5.3	4.3	5.5	83.3	71.2	66.5	73.4	74.3	75.9	75.9	80.5	76.0	NORTHAMPTON
OUNDLE	82.8	85.1	81.4	68.0	60.9	54.6	48.2	40.7	54.4	3.3	5.2	20.3	27.1	36.5	38.5	52.6	35.0	9.0	4.8	6.5	3.7	6.6	5.1	6.3	3.5	5.0	9.2	8.1	11.7	24.0	33.7	41.6	44.8	56.1	40.0	OUNDLE
†PETERBOROUGH	84.0	76.3	77.6	59.2	55.3	53.7	49.6	44.6	52.4	2.1	4.4	25.5	29.7	35.8	39.4	45.2	35.1	7.6	11.1	10.2	9.8	9.8	4.7	4.2	3.0	6.3	7.6	13.2	14.6	35.3	39.5	40.5	43.6	48.2	41.4	PETERBOROUGH
POTTERSPURY	58.9	57.5	60.4	35.0	33.3	26.2	21.7	21.9	28.8	27.4	29.7	58.5	60.0	67.4	68.6	68.8	64.6	29.2	6.1	3.4	1.2	1.1	1.8	1.4	1.7	1.4	33.0	33.5	33.2	59.7	61.1	69.2	70.0	70.5	66.1	POTTERSPURY
THRAPSTON	10.9	38.7	47.2	24.4	24.1	15.3	12.7	16.8	18.6	43.8	40.9	60.7	68.9	71.3	77.0	75.1	70.6	72.0	9.9	4.9	11.9	3.8	6.9	5.5	7.6	7.1	79.7	53.7	45.8	72.6	72.7	78.2	82.5	83.0	77.8	THRAPSTON
TOWCESTER	38.9	47.9	49.6	30.1	25.8	29.2	22.2	17.7	25.0	27.4	29.6	58.5	67.3	64.1	67.6	71.9	65.8	43.9	16.2	12.5	6.1	1.9	2.0	3.3	4.9	3.6	50.7	43.6	42.1	64.6	69.2	66.1	70.9	76.8	69.5	TOWCESTER
WELLINGBOROUGH	1.1	16.2	40.5	24.8	20.8	20.0	16.0	16.0	19.5	22.4	45.5	64.3	70.5	70.6	74.2	75.5	71.0	82.2	50.8	5.6	3.8	2.2	2.2	2.2	2.2	2.5	86.4	73.2	51.2	68.1	72.7	72.8	76.4	77.7	73.5	WELLINGBOROUGH
MEANS	25.7	35.4	46.1	32.3	27.8	26.3	23.1	21.9	26.3	21.6	37.0	55.1	60.6	62.8	61.8	68.5	62.3	58.4	32.2	8.7	6.2	5.1	4.5	5.0	4.1	4.9	62.8	53.9	45.7	61.3	65.7	67.3	69.8	72.6	67.3	

* In the returns for the years 1892-97 the number of Certificates of Conscientious Objection received in respect of the children born in 1895 has not been included.

* In the returns for the years 1893-97 the number of Certificates of Conscientious Objection received in respect of the children born in 1897 has not been included in the Percentages "Not finally accounted for," but allowance has been made for these in the "Total Living Unvaccinated."

† The Soke of Peterborough is a County in itself, and I am therefore much indebted to the courtesy of the Clerk of the Peterborough Union for furnishing me with information for the purposes of this table.
N.B.—The Rural Districts of Crick, Oxendon, Gretton, Easton-on-the-Hill, and Middleton Cheney are included in Unions in the Counties of Warwick, Leicester, Rutland, and Oxford, and do not therefore enter into the above Analysis; on the other hand the Unions of Oundle and Thrapston each include a few parishes in Huntingdonshire.

conditions were concerned, in respect of the water supply generally, and of shallow sources of supply in particular. There was no shortage of supply to a serious extent in any part of the County; but it is evident that some villages should be dependent no longer on shallow wells for their supply, in spite of the absence in them of disease attributable to water coming from suspicious sources. There was no failure on the part of any of the public water supplies which have been established, and their extension in some directions is much to be commended. I am glad to note that the village of King's Cliffe in the Oundle Rural District has now a satisfactory public supply, and that one is projected for Corby in the Kettering Rural District; it is to be hoped, too, that the negotiations proceeding now in respect of a public supply to the parish of Thrapston itself will result in substantial progress being made during the current year. The improvement of the supply to the village of Stoke Bruerne in the Towcester Rural District is now in hand, and the question of the supply to the villages of Grendon and Great Harrowden in the Wellingborough Rural District will be pushed forward, I trust, without serious delay. The public water supplies of all the Urban Districts, in respect both of quantity and quality, have proved to be satisfactory during the year, and it is especially a matter of congratulation that the extra strain put upon all the supplies within the area of the Army manœuvres, within this County, was met without detriment to either the resident or imported population.

BRACKLEY BOROUGH.—“ The supply at present is good and
 “ ample, the year having been marked by heavy rainfall.
 “ At the present time there is 14 ft. of water in the new well;
 “ 3 years ago, after the drought, it stood at 3 ft. 10 in. The
 “ old well, which was then dry, now contains about 9ft. of
 “ water. About 52,000 gallons of water are pumped daily,
 “ giving about 20 gallons per head of population. The large
 “ reservoir has recently been thoroughly emptied and
 “ cleansed.”

DAVENTRY BOROUGH.—With regard to the supply obtained from Dodford, “ the scheme for the softening of this water
 “ has now been approved and the work involved should be
 “ complete in the course of the present year. . . It is
 “ satisfactory to note that during the Army Manœuvres
 “ (September, 1913), when between 2,000 and 3,000 men were
 “ encamped outside the town the very considerable amount
 “ of water required for men and horses was obtained from the
 “ town supply with the greatest facility, and without causing
 “ any shortage for the time being or afterwards.”

DESBOROUGH URBAN.—“ In Harrington Road the water
 “ main has been extended to permit of the new houses erected
 “ in that locality being supplied with the Town water.”

FINEDON URBAN.—“ Complaints are still received from
 “ the inhabitants at the Church end of the town about the
 “ unsatisfactory condition of the water, the result of the want
 “ of regular flushing out of the dead ends. This is certainly
 “ a matter which ought to be remedied.”

RAUNDS URBAN.—Speaking of the new public water supply,
 “ During these three years the analyses have all been most
 “ satisfactory, and during abnormal months of rain or ab-
 “ normal drought there has been no fluctuation in quantity
 “ nor change in quality, and there seems to be no reason to
 “ doubt the perfect safety of the water from contamination.
 “ 808 houses are supplied with water direct from the town
 “ water mains.”

ROTHWELL URBAN.—The public water supply comes
 “ from a natural spring on the Shotwell Hill Estate,” and it
 is stated that “ bacteriological and chemical examinations
 “ have been made during the year, and the water is now good
 “ and wholesome.”

RUSHDEN URBAN.—Bacteriological examination of the

water supply, “ shows it to be of a high degree of bacterial
“ purity and affords no evidence of sewage pollution.” The
supply was abundant, and the service is a constant one.

WELLINGBOROUGH URBAN.—“ The water being very hard,
“ is subjected to a softening process carried out on a con-
“ tinuous system, is then filtered, and pumped to a service
“ reservoir from which it flows by gravitation to the mains
“ for distribution.”

BRACKLEY RURAL.—“ The water supply of the district,
“ which is derived from shallow wells, has been quite ade-
“ quate during the year. The continued absence of water-
“ borne disease testifies as to its quality, although the danger
“ of pollution from soakage and rain water must always be
“ present.”

DAVENTRY RURAL.—“ The water supply of the villages is
“ mostly from wells, which on the whole have given a satis-
“ factory, though possibly a doubtful supply; . . . Two
“ Parishes have a public water supply; one is supplied by
“ a company; and three others have private supplies.”

GRETTON RURAL.—“ At Harringworth spring water
“ gravitates to the village and is distributed by stand pipe
“ and troughs. The supply for the other villages is from
“ springs and shallow wells.”

HARDINGSTONE RURAL.—“ No complaints have been re-
“ ceived as to shortage of water where public supplies have
“ been provided. . . In other parts of the district the
“ supply appears to be sufficient, but at Milton the water
“ in some cases has to be carried a considerable distance.
“ Two samples of water have been analysed—one was good,
“ and one was certified as unfit for consumption and the well
“ was closed.”

NORTHAMPTON RURAL.—“ The supply at Heyford has been
 “ extended during the year. . . A water supply has been
 “ laid on to Little Billing by Lady Wantage from a Spring
 “ which at one time helped to supply Northampton. . .
 “ Mr. Watts has also brought a supply of water from the hill
 “ above Harpole to supply his cottages in this village; the
 “ supply is plentiful and good, and if necessary might be
 “ extended to the whole village.”

OUNCLE RURAL.—“ The laying on of water to King’s Cliffe
 “ constitutes the important work of the year. . . The
 “ present supply is derived from a spring in the limestone
 “ rock close to the Apethorpe and King’s Cliffe road; from
 “ there it is pumped to a reservoir on high ground and descends
 “ by gravitation to the village.”

OXENDON RURAL.—“ The water supply has been satis-
 “ factory throughout the year, but there is still a shortage
 “ of water for some cottages in Oxendon.”

POTTERSPURY RURAL.—“ A new public supply will be
 “ provided this year for Potterspury. . . A new scheme
 “ is being prepared for a public supply for Old Stratford.”

THRAPSTON RURAL.—“ In the early part of the year I
 “ again drew the attention of your Council to the necessity
 “ of providing a public water supply for Thrapston. . .
 “ I think Islip should be included in the scheme.” The
 matter is now under consideration.

TOWCESTER RURAL.—“ During the year, a scheme was
 “ prepared for an addition to the supply at Stoke Bruerne
 “ and an application has been made to the Local Government
 “ Board to sanction a loan for carrying out the improvement.”

WELLINGBOROUGH RURAL.—“ I visted Grendon and made
 “ an inspection of the water supply of the village. This is

“ obtained from various wells. . . . I found that only one
 “ well in the whole village gave a supply of water which was
 “ wholesome and fit for drinking and domestic purposes.
 “ I understand that steps are now being taken to obtain a
 “ public supply for the whole parish. . . . I reported to
 “ your Council that only four, or possibly five houses at Great
 “ Harrowden are in possession of a pure and wholesome
 “ supply. . . . It is evident, therefore, that the question
 “ will have to be faced of providing a supply for those premises
 “ which at present have no pure water.”

DWELLING HOUSES AND OVERCROWDING.

There can be no doubt that, among the chief and most important sanitary questions affecting the community, recognition must be given to the sufficient and healthy housing of the artisan and labouring classes. At the present time, the most useful statutory powers to ensure the fulfilment of these conditions are the Housing of the Working Classes Acts, 1890 to 1903, and the Housing, Town Planning, &c. Act, 1909. The powers of District Councils under these Acts are large and direct; those of County Councils are indirect, and dependent upon the inaction of District Councils and the approval of the Local Government Board.

The main obstacle to the sufficient provision in many places of dwellings for the classes indicated, is to be found in the economic difficulty involved in the price of building and the local rates of wages as affecting the power of rent-paying to meet the interest on capital expenditure. This economic difficulty is more often acute in rural areas than in urban; but in some Counties it is felt in both urban and rural districts. To some extent, Northamptonshire affords an illustration of this last more generally felt difficulty.

In addition to the extracts, which are herewith appended, from the reports of District Medical Officers of Health for the year 1913, I have prepared tables showing the sum of

the operations which have taken place during the past four years in the County, under the Housing, Town Planning, etc. Act., and these give in convenient form a large amount of information on the subject of housing in the County. They do not in detail show the need of additional housing accommodation which is required in particular districts, but hereafter it may be possible to show such requirements more explicitly. In the meantime, it is interesting to note that the results of District Council action in this County have gone far to support my previously recorded contention that a considerable proportion of shortage in housing accommodation was due to insufficient regular repair of property. It is certain, however, that, in the erection of new cottages, there should be no deviation from the rule of providing a minimum of three bedrooms, as there is a distinct shortage of this class of property in the rural districts of the County.

During the four years 1910 to 1913 inclusive, it will be seen that 686 houses in the Urban Districts and 494 in the Rural Districts, or an aggregate of 1,180 houses were found to be unfit for habitation. 807 representations were made to the Local Authorities; consequent thereon, 29 houses were demolished by order, and 144 voluntarily by owners, or a total of 173 houses in all; 267 closing orders were made, resulting in 107 houses being made fit for habitation; while as many as 2,997 houses were put into proper state of repair without the necessity for closing orders being made. These figures can hardly be held to show general neglect of their duties under the Housing and Town Planning Act by Local Authorities, although it is admitted that the rate of progress has not been uniform throughout the County and that in some districts a good deal yet remains to be done. But the influence of the Act has been felt sensibly in the County, and operations under it may be expected to be further stimulated by the inspections undertaken already in certain Districts by the Local Government Board and in prospective action by the County Council.

ANALYSIS OF VACCINATION OFFICERS' RETURNS, 1893-1912.

UNIONS OF THE COUNTY OF NORTHAMPTON.	PERCENTAGES OF BIRTHS IN RESPECTIVE YEARS.																																			
	Certificates of "Successful Vaccination." (Col. 1).									Certificates of "Conscientious Objection." (Col. 2)							Not finally accounted for. (Col. 3)								Total Living Unvaccinated. (Col. 2 + Col. 3).											
	1893-97	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	1893-97	1898-1902	1903-1907	1908	1909	1910	1911	1912	1908-1912	*	1893-97	1898-1902	1903-1907		1908	1909	1910	1911	1912
BRACKLEY	39.1	51.3	68.9	50.0	36.2	23.3	18.9	21.6	30.0	10.7	13.6	31.3	45.2	48.7	52.1	59.7	47.4	47.7	30.8	9.2	11.1	12.9	22.9	24.3	12.7	16.7	49.3	41.6	22.8	42.4	58.1	71.6	76.4	72.4	64.1	BRACKLEY
BRIXWORTH	42.9	50.6	58.6	50.0	46.0	36.4	32.4	31.8	39.3	14.4	20.9	40.6	45.5	56.8	58.5	56.7	51.6	44.2	28.0	12.9	4.8	5.1	3.5	6.3	6.1	5.1	49.2	42.5	33.9	45.4	50.6	60.3	64.8	62.8	56.7	BRIXWORTH
DAVENTRY	51.1	56.9	64.3	44.9	40.8	36.0	29.6	26.9	35.6	15.0	18.4	39.9	43.0	53.5	49.5	56.7	48.5	36.3	19.8	10.5	9.4	10.4	5.2	12.5	11.9	9.8	39.4	34.8	28.9	49.3	53.4	58.7	62.0	68.6	58.4	DAVENTRY
HARDINGSTONE	38.5	48.9	47.2	28.4	27.6	26.2	18.4	17.2	23.5	34.4	41.0	59.9	64.3	66.3	76.8	76.4	68.7	42.7	8.2	4.3	3.7	1.8	2.1	2.1	2.4	2.4	51.1	42.7	45.3	63.6	66.1	68.4	78.9	78.8	71.1	HARDINGSTONE
KETTERING	1.6	17.3	28.5	17.6	13.4	12.7	12.6	10.1	13.2	21.4	51.9	71.5	76.3	77.8	77.7	81.3	76.9	84.2	47.7	10.2	2.9	2.4	2.6	3.4	2.1	2.6	84.2	69.2	62.1	74.4	78.7	80.4	81.1	83.4	79.6	KETTERING
NORTHAMPTON	3.7	16.6	24.8	20.3	18.0	16.9	16.3	14.5	17.2	31.4	56.4	66.5	68.5	70.7	70.6	76.2	70.5	74.2	39.8	10.1	6.9	5.8	5.2	5.3	4.3	5.5	83.3	71.2	66.5	73.4	74.3	75.9	75.9	80.5	76.0	NORTHAMPTON
OUNDLE	82.8	85.1	81.4	68.0	60.9	54.6	48.2	40.7	54.4	3.3	5.2	20.3	27.1	36.5	38.5	52.6	35.0	9.0	4.8	6.5	3.7	6.6	5.1	6.3	3.5	5.0	9.2	8.1	11.7	24.0	33.7	41.6	44.8	56.1	40.0	OUNDLE
†PETERBOROUGH	84.0	76.3	77.6	59.2	55.3	53.7	49.6	44.6	52.4	2.1	4.4	25.5	29.7	35.8	39.4	45.2	35.1	7.6	11.1	10.2	9.8	9.8	4.7	4.2	3.0	6.3	7.6	13.2	14.6	35.3	39.5	40.5	43.6	48.2	41.4	PETERBOROUGH
POTTERS PURY	58.9	57.5	60.4	35.0	33.3	26.2	21.7	21.9	28.8	27.4	29.7	58.5	60.0	67.4	68.6	68.8	64.6	29.2	6.1	3.4	1.2	1.1	1.8	1.4	1.7	1.4	33.0	33.5	33.2	59.7	61.1	69.2	70.0	70.5	66.1	POTTERS PURY
THRAPSTON	10.9	38.7	47.2	24.4	24.1	15.3	12.7	16.8	18.6	43.8	40.9	60.7	68.9	71.3	77.0	75.4	70.6	72.0	9.9	4.9	11.9	3.8	6.9	5.5	7.6	7.1	79.7	53.7	45.8	72.6	72.7	78.2	82.5	83.0	77.8	THRAPSTON
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RURAL DISTRICTS.

(For the Years 1910 to 1913 inclusive.)

NAME OF DISTRICT.	Number of Dwelling-houses Inspected.	Number of Houses found to be unfit for habitation.	CLOSING ORDERS.		Number of Houses in which defects were remedied without Closing Orders being made.	Number of Houses rendered fit for habitation after making Closing Orders.	NUMBER OF HOUSES DEMOLISHED.		GENERAL CHARACTER OF DEFECTS FOUND TO EXIST.	REMARKS.
			Number of representations made to local authority.	Number of Closing Orders made.			Under Demolition Orders.	Voluntarily by Owners.		
BRACKLEY	527	74	92	...	345	...	...	3	A large number of the cottages were in a dirty state, and with insufficient light and ventilation. Drains were bad, also the coverings to water wells. Overcrowding rather prevalent.	
BRINWORTH	335	11	...	4	109	...	...	1	Free circulation of air in the bedrooms and pantries. Few were damp from subsoil and bad roofs, few dirty and dilapidated. Drains and privies to a few.	About 3-5ths of the houses in this District have pan, traps and gulleys connected to the sewers. 10 of the cottages found unfit for habitation were made into 5 cottages, 3 were closed voluntarily, and in 1 work is in hand.
CRICK	177	2	1	1	173	...	...	2	Dampness: no through or cross ventilation, unpaved yards, broken floors, windows not made to open, defective privy middens, and an absence of ash-bin accommodation.	Most of the cottages have been dealt with by informal notices under the Public Health Act, 1875, as the tenancies commenced before the date of the passing of the Housing, Town Planning, etc., Act, 1909.
DAVENTRY	447	24	26	14	334	...	6	7	Drainage, closet accommodation, ventilation, dampness and general repairs.	The figures for 1910—12 are taken from Records kept by the two former Sanitary Inspectors. The amount of Housing work carried out during 1913 has been little owing to the change of office of Sanitary Inspector. 2 new houses have been erected on site of old ones.
EASTON-ON-THE-HILL ...	Not recorded.	98	...	...	62	...	...	...	Defective roofs—bad sanitary condition of yards—defective drainage, want of eaves gutters, and fall pipes—defective closet accommodation—unprotected wells.	In addition to the 62 houses repaired, there are at the present time 14 houses undergoing repair.
GRETTON	188	7	1	1	5	...	...	...	Defective privy pits, drains, floors, yard pavings, roofs, and generally out of repair.	At 136 houses defects existed, but not to such an extent as to make them unfit for habitation. These defects are being remedied as expeditiously as practicable. In one village the whole of the roofs have been attended to, privies are being converted into pail closets, and yards are being well paved. One cottage closed voluntarily.
HARDINGSTONE	103	3	...	4	181	2	2	2	Structural and drainage defects.	
KETTERING	205	8	...	2	161	...	...	6	Drainage, insufficient closet accommodation, ventilation and lighting. Uncleanliness and structural defects.	Enforcement of Closing Orders adjourned. No other houses being available; but some in course of erection.
MIDDLETON CHENEY	178	23	53	14	152	4	...	4	A number of cottages were in a dirty state, and having insufficient light or ventilation. The drains in a majority of cases were very bad, and there were frequent cases of overcrowding.	
NORTHAMPTON	178	6	...	...	126	...	...	4	Want of repairs, cleansing, drainage, and ventilation.	The desire of the Council has been to bring about a satisfactory improvement without resort to strong measures, and they have had this desire well met.
OUNDLE	156	26	26	7	78	...	...	1	Defective light and ventilation in bedrooms, defective floors, paving, drainage, roofs and plaster. Want of eaves gutters.	
OXENDON	1,119	15	18	1	20	1	...	1	Leaky and decayed roofs, insanitary, etc., dampness, and structural defects.	Three houses not inhabited for years put in order and now occupied.
POTTERS PURY	519	18	18	10	6	1	...	2	Dilapidated state of buildings, leaky roofs, badly ventilated, damp walls, etc.	Further action is pending with regard to 7 houses in respect of which representations have been made to the Local Authority during the period 1910—13.
THRAPSTON	152	10	63	4	56	10	...	...	In bad state of repair. Want of closet accommodation. Badly ventilated. Absence of wash-houses.	
TOWCESTER	35	10	5	5	5	2	2	1		
WELLINGBOROUGH ...	320	156	156	36	57	19	...	33	General dilapidation and want of repair.	47 houses were permanently closed.
Totals	4,639	494	459	103	1,870	39	10	67		

It will be noted in the extracts taken from the reports of the Medical Officers of Health, that the building of cottages by District Councils is contemplated in Brackley Borough, Rushden Urban, Crick Rural, Gretton Rural, and Kettering Rural Districts, while cottages have been built already in the Towcester Rural District, and the building of others is recommended, or the scarcity of dwellings is pointed out, in the Desborough Urban, Irthlingborough Urban, Wellingborough Urban, Brackley Rural, Daventry Rural, Hardingstone Rural, Oundle Rural, Thrapston Rural, and Wellingborough Rural Districts. The number of working-class dwellings built by private enterprise during the year was small, and it is remarkable that none of that class were erected in the Wellingborough Urban District though there was an absence of empty houses there. As a contributory measure for lessening the want of suitable cottages in particular areas, the question must inevitably come up for consideration whether such relief should not be supplied, in part, by the erection of cottages by the County Council for the housing of policemen, main-roadmen, and teachers in Council Schools.

BRACKLEY BOROUGH.—“ Some few of the cottages are
 “ in bad repair and condition, mostly occupied by tenants who
 “ would be considered undesirable by the private property
 “ owner ; those in Barratt’s Yard mentioned by Dr. Fletcher
 “ in his report 3 years ago are in *statu quo*. The question
 “ of provision of cottages by the authority has been under
 “ consideration and you have decided to build a number on
 “ the Halse road on land offered by Lord Ellesmere, as stated
 “ in my last report, at a nominal rent for their accommoda-
 “ tion. . . . No case of overcrowding has required to be
 “ dealt with. . . . The Inspector has practically completed
 “ his house to house inspection. He has now a card index
 “ of nearly the whole of the houses in the town.”

DAVENTRY BOROUGH.—“ From March 25th to December
 “ 31st, 1913, 212 re-inspections have been made under the

“ Housing and Town Planning Act. Of these, 190 houses
 “ have been put into proper repair and seven houses have
 “ been demolished voluntarily by the owners. Ten new
 “ houses have been built. . . . The housing of the working
 “ classes in the Borough is adequate and no cases of over-
 “ crowding have been reported.”

HIGHAM FERRERS BOROUGH.—“ During the year there have
 “ been twelve new houses built. . . . 83 houses have been
 “ inspected and of these 69 have been found defective in a
 “ more or less degree. In 61 cases the houses have been put
 “ in a proper state of repair, and the remaining eight are
 “ about to receive attention. It has not been found necessary
 “ to make any closing order. . . . It has been necessary to
 “ call attention to five cases of overcrowding, and these have
 “ now been abated.”

DESBOROUGH URBAN.—Ten new houses were built. “ The
 “ housing accommodation was sufficient to meet the needs of
 “ the district ; but in view of the increase of the population
 “ from natural causes, and by the influx of workers from the
 “ neighbouring villages and elsewhere, it is evident that un-
 “ less the building trade becomes brisker than it is at present
 “ the demand for cottages in the near future will exceed the
 “ supply.”

FINEDON URBAN.—“ No new houses have been built.”

IRTHLINGBOROUGH URBAN.—As an illustration of the
 scarcity of houses, “ In two instances where closing orders
 “ were issued, no houses could be found by the tenants, and
 “ they were compelled to leave the district. Fortunately,
 “ there are now few, if any, houses in the town that are likely
 “ to be condemned under Sec. 17.”

KETTERING URBAN.—In regard to inspections under the
 Housing and Town Planning, etc., Act, 1909, “ Several cases

“ of overcrowding have been discovered during these in-
 “ spections, usually being due to two families living in the
 “ house. The excuse was lack of houses in the district.
 “ Now this and the requirements of the Housing and Town
 “ Planning Act, 1909, will doubtless necessitate the con-
 “ sideration by you of the building of suitable workmen’s
 “ houses, especially in view of the fact that an increase in
 “ the number of workmen may be expected, as several large
 “ additions have been made to certain factories, and others
 “ are in process of construction.” The number of houses
 inspected was 119; 55 closing orders were made; and 45
 houses were put in a fit state for human habitation after the
 making of the closing orders. “ Two houses in Richards
 “ Leys were demolished by the owner, demolition orders
 “ having been made by the Council during the year 1912.”

OUNDLE URBAN.—There were no cases of overcrowding;
 but 5 closing orders were made, inclusive of three houses as
 to which representations had been made in 1912. Eight new
 houses were erected during the year.

RAUNDS URBAN.—“ It may be said that the housing
 “ accommodation for the working classes in the district is
 “ ample, and no new houses were erected or required during
 “ 1913. Many of the old houses have either been demolished
 “ or made fit for human habitation; some have been closed
 “ and will no doubt be demolished very soon. The number
 “ of houses unoccupied at the end of the year was 30 (approxi-
 “ mately), in 1912 about 50 were empty, and in 1911 no fewer
 “ than 60 houses were unoccupied, so that it will be seen that
 “ housing accommodation in Raunds District is more than
 “ sufficient for the inhabitants.” In spite of this condition
 of affairs, it appears that seven cases of overcrowding required
 attention, and that a Magistrate’s order was necessary in one
 instance to secure its abatement.

ROTHWELL URBAN.—396 houses were inspected. “ Only
 “ 6 statutory notices were served on the owners during the

“ year, relating to 19 houses which were made fit for habitation without the necessity of making closing orders.”

RUSHDEN URBAN.—“ For the most part the houses of the working classes are of a substantial character and generally decently kept. There are a few of the older type belonging to bygone years that cannot be classified as model dwellings, but as the housing accommodation is at present not equal to the demand it is not desirable in my opinion to recklessly condemn any that can be made decently habitable without injury to health until the supply can be met. . . . The Local Authority have decided to apply to the Local Government Board to sanction a loan in order to proceed at once to erect about 40 houses of a class suitable for modern workmen’s dwellings, which, when complete, will ease the situation a little at the present rate of increase.” There appear to have been 10 representations made with a view to closing orders; these were met by the voluntary closure in 4 instances, and repair in 6. There were 19 new houses for the working classes erected during the year.

WELLINGBOROUGH URBAN.—It appears that 17 closing orders were made, but none were determined and no houses were demolished; the need of assistance for systematic inspection of houses is emphasised. “ During the year twelve new houses were erected. All of them are rather better class houses, and are mostly occupied by their owners. It is a noteworthy fact that during the year no houses for the working classes have been erected. The demand for this type of house fluctuates with the state of trade. Six years ago there were, I understand, over three hundred empty houses of this class; to-day there are practically none.”

BRACKLEY RURAL —“ With regard to house accommodation, a number of cottages have been allowed to fall into a state of ruin during the last ten years. An inspection of the

“ district was carried out by an Inspector of the Local
 “ Government Board, and you have already had an oppor-
 “ tunity of considering his report.”

BRIXWORTH RURAL.—It appears that plans for 20 new houses have been prepared, that 15 houses have been, and that 5 are being, built, while 201 dwellings have been inspected under the Housing Act, 1909. “ 5 dwelling-houses the
 “ Council have under consideration for a closing order.”

CRICK RURAL.—“ As a result of a petition to the L.G.B.,
 “ signed by some inhabitants of Crick, an enquiry was held
 “ by Mr. Courtenay Clifton, at the Council Offices, on May 6th,
 “ afterwards an inspection of the district was made, and as
 “ a sequel to this enquiry and examination, it was suggested
 “ that six houses should be built at Crick, four at Kilsby,
 “ and three at Barby. Steps have been taken for the pur-
 “ chase of land at Crick, but so far it has been impossible to
 “ obtain a suitable site. No new cottages have been built
 “ during the year. One was closed and demolished. Repre-
 “ sentations of two others at Barby were made, and these
 “ have been made reasonably fit for habitation. 72 houses
 “ have been inspected.”

DAVENTRY RURAL.—“ As things are at present, private
 “ enterprise cannot build houses suitable for the working
 “ classes with any hope of seeing a fair return for their money. .
 “ In my opinion there is a deficiency of housing accommoda-
 “ tion for the working classes in the parish of Braunston,
 “ where some 8 to 12 houses are needed, and in the parish of
 “ West Haddon, where some 5 or 6 houses are also needed.
 “ Should these in course of time be built, they must have
 “ three bedrooms for each house. During the year some
 “ houses were built at Byfield and the difficulty got over
 “ there.” Six closing orders were made.

EASTON-ON-THE-HILL RURAL.—The number of dwelling-houses inspected was 62, of which 32 had defects. Twelve of these houses were made fit for human habitation without recourse to closing orders, and fourteen other houses are at present undergoing repair.

GRETTON RURAL.—“ The one parish where workmen’s cottages are urgently required is Gretton. No less than seven accentuated cases of overcrowding came under observation during the year, and there are several others in which the conditions are but little better. I am of opinion that a dozen labourers’ cottages should be provided in this village. Private enterprise has failed to meet the requirements of the population, and building has for years been at a standstill. The matter is now receiving your favourable consideration. You have an excellent site in view, and I hope there will be no further delay in this most necessary reform.”

HARDINGSTONE RURAL.—During the year 75 houses were inspected but no closing orders were made. “ Plans for the erection of six new houses have been passed by the Council, and they have been built or are in course of erection.” It is pointed out that “ where there are only two bedrooms that overcrowding is most likely to occur, and I should like to see more cottages built with three bedrooms. . . . Many of the cottages are old and need frequent repair of roofs, windows, etc., but the walls are thick and substantial, keeping out the weather far better than the modern cottage. . . . Most difficulty is found in the matter of ventilation ; being old the rooms are often very low and the windows small, but of late years, in many cases, more windows have been made, especially with the view of getting cross ventilation through the houses.”

KETTERING RURAL.—There were 82 houses inspected, and 2 closing orders made. Two other houses were closed

voluntarily. It appears that the Parish Councils of Corby and Geddington recommend the building of 12 and 5 houses respectively, while there were 15 houses only built in the district during the year. "Three houses were found to be overcrowded."

MIDDLETON CHENEY RURAL—"As only five new houses have been erected in the district during the past year and the population would appear to remain stationary with work sufficient for its maintenance, too drastic consideration of this matter does not appear to be a desirable proceeding." Some 178 houses were inspected, and 14 closing orders were made, in respect of which 5 houses had been put into a proper state and 9 were being attended to.

NORTHAMPTON RURAL.—70 houses were inspected, and 1 unfit for habitation was demolished. "At Duston, plans have been passed for four new workmens' houses and one Baptist Chapel, also additions to two existing houses, and two good villa residences have been erected. One new house has also been built at Harpole. At Weston, one ruined house has been pulled down and two very nice cottages erected in its stead. Maycock's Yard has been greatly improved, one house has been pulled down, giving more light and air to the others. . . . A new estate is being developed close to the Golf Links on the outskirts of Northampton but in the parish of Weston Favell. All the houses are detached or semi-detached small villas, and will form a small suburb to the town."

OUNDLIE RURAL.—Considerable inspection of houses was made in several of the villages. "There have been 10 new houses erected during the year—2 at Glapthorn and 8 at Woodnewton. The latter are very good houses. . . . I am of opinion that at least four houses should be built at Warmington—probably more are required, but there are four houses in Long Lane which are incapable of repair

“ and should certainly be demolished ; they remain occupied
 “ now because there is nowhere for the people to go to. Four
 “ houses in Thurning for a like reason, and six at King’s
 “ Cliffe.”

OXENDON RURAL.—“ Six cases of overcrowding have been
 “ under consideration, and in each case the nuisance has been
 “ abated.” A large number of houses were inspected ;
 “ as a result five houses were reported as unfit for human
 “ habitation, and in each case the owner has complied with
 “ the requirements of the Council.”

POTTERSPURY RURAL.—“ Thirteen houses were inspected
 “ and six were found to be unfit for human habitation . .
 “ Four cases of overcrowding occurred at Potterspury . .
 “ Two new cottages were erected during the year.”

THRAPSTON RURAL.—Some 63 houses were personally
 inspected, and 1 was condemned as incapable of repair.
 “ I am not aware of any new houses having been finished
 “ during the year. I do not think there is any demand for
 “ cottages for agricultural labourers, but I understand that
 “ there is a demand at Twywell. These would be for iron-
 “ stone workers. The matter is being considered by your
 “ Council.”

TOWCESTER RURAL.—“ I stated in my last report that
 “ seventeen cottages were being built for the accommodation
 “ of working people ; these were completed and all occupied
 “ at the beginning of August and there is now no deficiency
 “ of houses in Towcester, and to my knowledge none in other
 “ parts of the district, and I have not heard of any case of
 “ overcrowding.”

WELLINGBOROUGH RURAL.—“ There is an undoubted
 “ demand for working class houses in Irchester. The local

“ Co-operative Society, however, is laying out a building
 “ estate with the intention of erecting some workmen’s
 “ dwellings. In other parts of the district it would appear
 “ that at present the supply is equal to the demand. . . .
 “ Eight new houses were erected during the year, two each
 “ at Bozeat and Earls Barton, and one each at Great Harrow-
 “ den, Little Harrowden, Wilby and Doddington.” Seven
 cases of overcrowding were dealt with.

EXCREMENT AND REFUSE DISPOSAL.

With the improvement of water-supplies in the several Districts of the County, comes inevitably the insistent demand for the substitution of proper flushing apparatus to water-closets for that which is provided by hand. This is a matter which should meet with more remedial progress at the hands of the District Councils than it has in the past, and I hope to be able to report next year more favourably of the Wellingborough Urban District in this regard, than is shown to be possible now in the extract from the report of the Medical Officer of Health herewith subjoined. I am glad that progress is being made generally in the direction of the abolition of the privy-pit system, which, in the rural districts particularly, is a standing menace to the water supplies drawn from shallow wells ; but I could wish that more progress had been made in the direction of public scavenging of villages, to obviate the haphazard distribution of refuse on garden ground regardless of proximity to sources of water supply.

BRACKLEY BOROUGH.—“ House refuse is regularly col-
 “ lected once a week by the Council’s cart and disposed of at
 “ the Sewage Farm. . . . Several new water closets
 “ have been provided and many old middens have been
 “ either converted into pail or water closets or entirely re-
 “ moved. It is believed that there are now no midden closets
 “ in connection with dwelling houses in existence in the town.”

DAVENTRY BOROUGH.—“ Water closets to every house,
 “ except in solitary houses away from the town where the
 “ privy system is still retained.”

HIGHAM FERRERS BOROUGH.—“ The scavenging of the
 “ town has been efficiently carried out throughout the year,
 “ and I am glad to notice that the miscellaneous articles used
 “ as receptacles for refuse are gradually being replaced by
 “ proper covered bins.”

DESBOROUGH URBAN.—“ I much regret to observe that
 “ no steps have been taken by the Council to carry out the
 “ suggestion put forward in my last Report of requiring all
 “ W.C.'s to be provided with flushing apparatus. . . . It
 “ is worthy of remark that 3 ash-pits and 46 insanitary dust-
 “ bins have been abolished and replaced by proper galvanised
 “ receptacles during the year. Eight ash-pits only now
 “ remain to be dealt with.”

FINEDON URBAN —Appeal is made “ to the property
 “ owners to supply proper receptacles for the house refuse,
 “ and to the occupiers to reduce the amount of such refuse
 “ to a minimum by burning all they can.”

IRTHLINGBOROUGH URBAN.—“ The house refuse has been
 “ satisfactorily dealt with by your scavengers. The greater
 “ part of it was carted to the Sewage Farm and there burnt.”

KETTERING URBAN.—“ The smoke test was applied to the
 “ drains of no less than 221 houses, and this necessitated the
 “ redraining of 101 houses. All new drains were tested with
 “ the water test before being covered in, the water test being
 “ applied 133 times. . . . A great number of water-
 “ closets in the town are without water-supply, and, during
 “ 1913, 123 water-closets were provided with flushing cisterns
 “ and water supply.”

OUNDLE URBAN.—The Sanitary Inspector reports that
 “ it would be better if proper galvanised bins were provided
 “ for storing the refuse.”

RAUNDS URBAN.—“ With the exception of 25 houses which
 “ are outside the Sewerage area, and therefore have pail
 “ closets, every house in the District is provided with water-
 “ closets; 589 houses have proper water closets provided
 “ with flushing appliances and water laid on, 123 houses have
 “ water closets flushed by hand, and 160 have closets of the
 “ waste-water type; 9 houses outside the Sewerage area
 “ have their drains discharged into a cesspool.”

RUSHDEN URBAN.—“ The water-carriage system is uni-
 “ versal except in the outlying farms and tenements of the
 “ district where the water mains do not reach; in these
 “ places the pail system is still in force, or, as in two or three
 “ premises, cesspools exist which are periodically emptied
 “ by the Local Authority. . . . The removal of house
 “ refuse is undertaken by contract.” In this last connection,
 it is urged that there should be properly constructed carts
 or vans used in the collection to obviate the nuisance of dry
 refuse being blown about on windy days.

WELLINGBOROUGH URBAN.—The closet accommodation
 “ is almost entirely on the water-carriage system, the only
 “ privies being a few at a group of cottages on the outskirts
 “ of the district. The majority are hand-flushed, a method
 “ which is far from satisfactory owing to carelessness and in-
 “ sufficient flushing, and frequently results in choked drains.
 “ . . . In the interests of cleanliness and the public health
 “ it is imperative that all W.C.'s should be supplied with
 “ flushing cisterns. House refuse is collected once a week
 “ by the Council's covered wagons and conveyed to the local
 “ Gas Company's Works, where it is destroyed by incineration.
 “ . . . I am strongly of opinion that from May to October,
 “ at any rate, house refuse should be removed more frequently

“ than once a week. House refuse is stored in moveable
 “ receptacles, and there are practically no fixed ash-bins
 “ left. I regret to state, however, that many of these ‘ move-
 “ able receptacles’ are utterly unsuitable for the purpose. . .
 “ Every property should be supplied with a galvanised ash-
 “ bin *with a proper covering.*”

BRACKLEY RURAL.—“ The excrement disposal is practi-
 “ cally entirely by middens, and there is still room for im-
 “ provement in these in some cases. . . Water closets
 “ with cesspools exist in connection with the larger houses,
 “ but they are all well attended to by the occupiers. The
 “ weekly collection of house refuse is still made in King’s
 “ Sutton, and has been followed by a great improvement in
 “ the matter of accumulations of which I had previously
 “ complained.”

EASTON-ON-THE-HILL RURAL.—“ Pan closets are the type
 “ in general use though there are still some pit closets. The
 “ emptying of these and the disposal of house refuse is dealt
 “ with by each householder.”

GRETTON RURAL.—“ The village of Gretton is scavenged
 “ weekly at a cost of £30 per annum. In this village there
 “ are about a hundred moveable receptacles for night-soil,
 “ and water carriage is employed in eight instances. The
 “ other villages being very small do not possess a public
 “ scavenger. At Laxton all pits have now been replaced by
 “ pail-closets, and insanitary pits have also been abolished
 “ throughout the greater part of Wakerley.”

KETTERING RURAL.—“ There is still some shortage of closet
 “ accommodation in certain parts of the District. Every
 “ house should have its own separate closet, and all the new
 “ houses do, but in several cases there is still but one closet
 “ to two houses.”

MIDDLETON CHENEY RURAL.—“ With the exception of the
 “ system at Upper Boddington there is no definite scheme
 “ connected with accumulation or removal.” The disposal
 generally “ is done by occupiers either on the gardens or
 “ on the land.”

NORTHAMPTON RURAL.—There will shortly be made “ a
 “ weekly collection of pail closets in the villages of Bugbrooke,
 “ Heyford and Weston Favell.”

OXENDON RURAL.—“ The closet accommodation in the
 “ villages consists mainly of bucket-closets with a certain
 “ number of vaults and a few water-closets, practically none
 “ of these, however, are provided with proper cisterns as
 “ there is no water main laid on.”

POTTERSPURY RURAL.—“ The scavenging order has been
 “ adopted in the villages of Deanshanger, Cosgrove,
 “ Potterspury, and Old Stratford. The buckets are emptied
 “ and disinfected every week.”

TOWCESTER RURAL.—“ House refuse is removed by public
 “ scavenger in Towcester once a week, and in other parts
 “ of the district it is disposed of by occupiers. Privies,
 “ ashpits, and cesspools are also dealt with by occupiers.”

WELLINGBOROUGH RURAL.—“ At Irchester and Wollaston
 “ the pail system is being superseded by the water carriage
 “ system, the W.C.'s being connected with the sewers, and
 “ in each case an entirely new system of drainage is necessary.”
 Night scavenging of pail closets and house refuse removal,
 takes place in only a few villages. “ In connection with the
 “ water carriage system, I should like to see a more universal
 “ adoption of flushing cisterns.”

SEWERAGE AND SEWAGE DISPOSAL (POLLUTION OF STREAMS)

A large amount of attention has been paid during the year to matters in connection with sewerage requirements and the ultimate disposal of sewage. The sewage disposal schemes for the Urban Districts of Desborough and Raunds have been completed, that for Rushden Urban District was approaching completion at the end of the year, as was that also together with the sewerage, for Weedon Bec in the Daventry Rural District, and Greens Norton in the Towcester Rural District. A scheme for the remodelling of sewage disposal at Higham Ferrers has been the subject of a Local Government Board Inquiry, and the sewerage and sewage disposal scheme for Corby in the Kettering Rural District was commenced during the year. Steps are being taken, moreover, to prevent flooding of the low-lying parts of the town of Wellingborough by storm water, and the flushing of sewers at Irthlingborough has been shown to be necessary. It is evident that schemes for sewerage and sewage disposal are required for the parish of Long Buckby in the Daventry Rural District, and for that of King's Cliffe in the Oundle Rural District; but I am glad to be able to note that a good deal of sewerage work has been carried out during the year in parishes of the Brackley, Middleton Cheney, Oxendon, and Thrapston Rural Districts, while attention has been given to the sewage disposal scheme at Upper Boddington in the Middleton Cheney Rural District, and that sewerage requirements at Wollaston and Bozeat in the Wellingborough Rural District have been pointed out by the Medical Officer of Health. The works of sewage disposal for the Kettering Urban District have been well conducted during the year, and the resulting effluents have been found on repeated visits, to be quite satisfactory. There is no doubt that, during the past few years, the amount of river and stream pollution by sewage has been very greatly reduced; but the interception of sewage coming from some villages yet remains to be attended to, though I do not know of any instance where

the cost of doing so should be regarded as an unreasonable charge.

HIGHAM FERRERS BOROUGH.—“ The sewage works have
 “ received considerable attention during the year, and, al-
 “ though the farm has been maintained in a proper condition,
 “ the effluent has been far from satisfactory. . . . The entire
 “ question of sewage disposal has been considered by the
 “ Council, and plans for the treatment of the sewage by filtra-
 “ tion and sedimentation have been produced by your
 “ sanitary officer.”

DESBOROUGH URBAN.—“ The new sewage disposal works,
 “ the construction of which was mentioned in my last report
 “ as then about to be undertaken, have now been completed
 “ and give every promise of producing excellent results.”

IRTHLINGBOROUGH URBAN.—“ Complaints, well founded,
 “ were made during the summer of bad smells from the storm-
 “ water drains. More attention should be given to regular
 “ flushing during a spell of dry warm weather. . . . Blocked
 “ drains have been of frequent occurrence, due, in most
 “ instances, to insufficient flushing.”

KETTERING URBAN.—“ The sewage of the town has been
 “ dealt with at the Sewage Disposal Works satisfactorily as
 “ in previous years. The automatic working of the new system
 “ laid down a few years ago has proved quite satisfactory
 “ and economical in working.”

OUNCLE URBAN.—“ Alterations have been made at the
 “ Sewage Works and others are under consideration.”

RAUNDS URBAN.—“ Since the completion of the scheme
 “ for treating the sewage of the District on bacteriological
 “ lines, as proposed and carried out by your Surveyor, the
 “ whole process has been carried out in a most satisfactory

“ manner, and the sewage-distributors to the filter-beds have
 “ done their work splendidly, and the effluent which is dis-
 “ charged into the water-course has been most satisfactory
 “ according to the analysis of Mr. J. West Knights, Analyst,
 “ of Cambridge.”

RUSHDEN URBAN.—“ A new and extensive system of
 “ sewage disposal is now being completed under contract
 “ at the sewage outfall works.”

WELLINGBOROUGH URBAN.—It appears that steps are being
 taken to prevent flooding of low-lying parts of the town by
 the installation of a separate system for carrying off the
 storm-water. “ Apart from the question of flooding,
 “ however, signs are not wanting that the whole subject of
 “ the drainage and sewerage of the town will need to be con-
 “ sidered by the Council in the not very distant future.”

BRACKLEY RURAL.—The Surveyor has “ prepared plans
 “ and specifications for drainage, &c., in the parishes of King’s
 “ Sutton, Marston St. Lawrence, Greatworth, Farthinghoe,
 “ and Croughton. The new sewer at Westhorpe is complete,
 “ but the lower portion of that at Greatworth is not yet
 “ finished; the work will be proceeded with in due course.
 “ It is contemplated to put in new sewers at Farthinghoe
 “ and Croughton, and tenders for the work have been re-
 “ quested.”

DAVENTRY RURAL.—“ The Weedon Sewage Scheme is now
 “ nearly completed. . . I think before long some steps
 “ will have to be taken with regard to a sewage scheme for
 “ Long Buckby, and when undertaken I consider the whole
 “ town ought to be done. I also think your Council will have
 “ to consider the question of a sewage scheme for Braunston.”

GRETTON RURAL.—For treatment of sewage, “ very small
 “ tanks would suffice at Rockingham and at Wakerley, and

“ in the case of Gretton, where the fall is more than ample,
 “ there should be no difficulty in supplementing tanking by
 “ land treatment.”

HARDINGSTONE RURAL.—“ The Piddington sewage scheme
 “ has now been completed. It did not work quite satis-
 “ factorily at first and an alteration was made in the effluent
 “ pipe; it is now working well.” Attention was also paid
 “ to the sewage disposal schemes at Roade, Hardingstone,
 “ Brafield, and Yardley Hastings.”

KETTERING RURAL.—“ The new drainage scheme at Corby
 “ was begun in the early part of the year, and is nearing
 “ completion now.”

MIDDLETON CHENEY RURAL.—“ Special attention has
 “ been given to the Sewage scheme at Upper Boddington.
 “ A new sewer has been laid at Middleton Cheney and additions
 “ made to those existing at Chipping Warden and Aston-le-
 “ Walls.”

NORTHAMPTON RURAL.—The sewage tank at Duston “ has
 “ been working now for some years and a large amount of
 “ sludge has accumulated in it; it is shortly to be cleaned out,
 “ and, if found necessary, a sludge chamber will be added to
 “ it. . . . A sewage scheme for Weston Favell is urgently
 “ needed, and your Council have applied to the Town Au-
 “ thorities asking them to take the sewage of this village.”

OUNDLE RURAL.—In respect of King’s Cliffe, “ I would
 “ again urge upon your Council the necessity of making a
 “ proper sewerage system for this village.”

OXENDON RURAL.—“ During the year a new length of
 “ sewer has been laid and a septic tank constructed at Arth-
 “ ingworth and Clipston. At Farndon the sewer has been
 “ concreted in as the public pump had become polluted.

“ The Sanitary Inspector reports that at Wilbarston the
 “ south end of the village needs a new sewer, and that the
 “ Welford west end outfall would be greatly improved by the
 “ addition of a filter.”

THRAPSTON RURAL.—The Sanitary Inspector says, “ new
 “ sewers have been laid down in Aldwinckle and Tichmarsh
 “ which will prove very beneficial.”

TOWCESTER RURAL.—“ The plan referred to in my last
 “ report for the disposal of sewage at Greens Norton has been
 “ completed, and the work of connection will soon be pro-
 “ ceeded with. The main sewage pipes from Towcester to
 “ the sewage Farm were found to be very ‘ congested,’ and
 “ were thoroughly cleaned.”

WELLINGBOROUGH RURAL.—“ Last year there was, in
 “ times of heavy rain, some pollution of Wilby brook from an
 “ overflow from the sewage pumping station, but this has
 “ been remedied, and so far there have been no further com-
 “ plaints.” In respect of the conversion of pail into water
 closets, “ at Wollaston, however, there is insufficient
 “ sewerage to deal with the new system. . . At Bozeat,
 “ the drainage requires re-organizing.”

COMMON LODGING-HOUSES.

The few common lodging-houses in the County appear to
 have been kept under close observation during the year, and
 to have given rise to no serious complaints.

WELLINGBOROUGH URBAN.—“ Common lodging-houses are
 “ 4 in number, and surely sufficient for a town of this size.
 “ They have been regularly inspected, and on the whole there
 “ has been little fault to find with them.”

SLAUGHTER-HOUSES.

All the reports to hand contain record of attention having been paid to the condition of the slaughter-houses, and the nuisances connected with them do not seem to have gone beyond the occasional need of lime-washing, accumulations of manure, and slight drainage defects. Some slaughter-houses that I have seen in the County are exceptionally well kept; but the fact cannot be disguised that the private slaughter-house is not generally a commendable place. It is rarely in a good situation, not usually specially constructed for the purpose to which it is put, and is difficult to keep up to a good standard of excellence. There is good ground for saying that, in this County, the efforts to keep the slaughter-houses in a satisfactory condition are consistent and regular, and that those efforts meet with generally good results: but it is none the less not easy to defend the system of private-slaughtering, particularly considering the difficulties it entails for the inspection of all meat at the time of slaughtering. I cannot but think that the institution of a Public Abattoir in every Urban District should be made compulsory, and that groups of parishes in Rural Districts should be combined for the maintenance of a like establishment. It would then be easy to arrange for the regular inspection of all meat before it is passed out for consumption by the community.

DAIRIES, COWSHEDS, AND MILKSHOPS.

The condition of the dairies, cowsheds, and milkshops in the County has improved steadily during recent years, and I am glad to say that the attention given to them now is more regular and stringent than it was formerly. The year 1913 showed no falling off in the interest attaching either to the places where milk is produced or in which it is stored for sale. In the rural districts many considerable and intelligent improvements have been brought about in respect of the housing of dairy cows, but it is certain that further improve-

ments in the paving and ventilation of cowsheds yet remain to be carried out. The very considerable sale of milk from this County to London dealers has had an indirect influence in the bringing about of needed improvements, and the severe bacteriological examination of milk in London for the detection of tuberculosis germs has led to greater watchfulness over the health of the dairy cows themselves. In this last connection, however, I regret that there is not more systematic inspection of dairy cows on behalf of the Local Authorities, either singly or in combination for the purpose, and I hope that more attention will be given to this matter by the District Councils during the current year. As I said in my last report, “the insidious character of the onset of tuberculosis in the bovine as well as the human subject ought neither to be over-looked nor ignored, and the early detection of it in either subject can only be achieved by rigorous search for it.” The search for tuberculosis in the human subject is proceeding apace in this County by the careful examination of all who have been in “contact” with cases of phthisis, and it remains for the detection of one of the sources of tuberculosis in the human subject to be provided for in the regular examination of dairy cows by qualified veterinary surgeons. I hope that this responsibility will be emphasised to all those District Councils which have not as yet given it proper recognition.

HIGHAM FERRERS BOROUGH.—“All the dairies and cowsheds have been regularly inspected, and, now that several improvements in the drainage of certain premises have been effected, they are all in a very satisfactory condition.”

DESBOROUGH URBAN.—“It was found necessary to require the lime-washing of certain structures, and the abatement of nuisances caused by insufficient ventilation and the accumulation of manure.”

IRTHLINGBOROUGH URBAN.—From the Inspector’s report, it appears that “improvements and alterations, including

“ new drainage, channelling, etc., have been carried out at
 “ two sets of premises.”

KETTERING URBAN AND RURAL AND DESBOROUGH AND ROTHWELL URBAN.—The following particulars are taken from the report of Mr. Trevor Spencer, M.R.C.V.S., to the Joint Committee of these districts in regard to dairies and cowsheds:—The premises inspected were 343, and the dairy cows examined 3,358. 89.50 per cent. of the cowsheds were found to be in satisfactory condition; the bad conditions found included neglect of lime-washing, 6 cases; accumulation of manure in too close proximity to sheds, 15 cases; general dirty and ill-kept condition, 4 cases; bad general structural arrangements, 8 cases; absence of proper drainage, 3 cases. In the inspection of the udders of the 3,358 cows, it was found that 96.48 per cent. showed no clinical evidence of derangement; of the 118 abnormal udders, 12 were in a condition calculated to render the milk harmful if used in an uncooked state and five of these were affected with tuberculosis, the remainder being cases of acute or suppurative mastitis. A synopsis of the report, as concerning the several Urban and Rural Councils represented on the Committee, is given as follows:—

	Kettering U.D.C.	Kettering R.D.C.	Desboro' U.D.C.	Rothwell U.D.C.
No. of premises inspected	28	293	16	6
No. of sheds the sanitary condition of which was bad or unsatisfactory	4 or 14.28%	29 or 9.89%	2 or 12.5%	1 or 16.66%
No. of cows inspected with special regard to their udders	195	2,947	178	38
No. of abnormal udders	3 or 1.53%	103 or 3.49%	10 or 5.61%	2 or 5.26%
No. of udders secreting harmful milk	1	10	1	—
No. of Tubercular udders	—	1	1	—

In Kettering Urban, in respect of the milkshops, seventy visits were paid, “ the majority of these visits being to the “ small shops where general businesses are carried on. At “ the time of each visit the necessity of covering the recep- “ tacle containing the milk, to prevent the access of dust and “ flies, was pointed out.”

RUSHDEN URBAN.—According to the Inspector’s report, lime-washing of cowsheds was required on five occasions and in one ventilation was considered insufficient. Attention appears to have been given also to the covering over of milk in shops, to prevent the access of dust and flies.

WELLINGBOROUGH URBAN.—Referring to the failure of negotiations, in 1909, with neighbouring authorities for joint action in the inspection of dairy cows, “ I sincerely trust “ that the question will be taken up again with more hope of “ success this time, for there is a steadily increasing volume “ of evidence that tuberculous milk is responsible for many “ of the non-pulmonary forms of tuberculosis in children.” With regard to the milk shops, “ many of the premises “ though kept very clean are not at all suitable for the purpose. “ More attention might be paid to the covering of milk “ receptacles in order to prevent the access of dust and flies.”

BRACKLEY RURAL.—“ All the dairies and cowsheds have “ been inspected, and they are in a satisfactory state both “ structurally and as regards cleanliness, a very great im- “ provement having been secured in both conditions during “ late years.”

BRIXWORTH RURAL.—In regard to cowsheds, there was “ one complaint for bad floor and drainage, which has all “ been relaid.”

DAVENTRY RURAL.—“ The dairies, cowsheds and milkshops “ in the district have been looked after regularly, and in many

“ cases improvements and alterations have been insisted upon, and duly carried out.”

OUNCLE RURAL.—The Sanitary Inspector reports that “ one cowshed was condemned as unfit, and two new sheds have been erected.”

OXENDON RURAL.—“ The defects during the year consisted of one case of a manure heap near the building, two of defective limewashing, one of want of ventilation, and one of defective drainage.”

WELLINGBOROUGH RURAL.—“ We have no routine veterinary inspection of dairy cows in this district, such as is in force in some of our neighbouring districts. This should be remedied at once, and everything possible should be done to ensure a supply of pure and uncontaminated milk.”

FACTORIES AND WORKSHOPS (BAKEHOUSES).

The inspection of factories and workshops has evidently been carried out conscientiously during the year, and it is pleasing to note that the occasions were not many in which attention had to be called to infringement of regulations. The chief troubles now, as formerly, in regard to factories appear to be in the matter of ventilation, through the interference with the means provided by the factory hands themselves, and in the latter's careless use of sanitary conveniences. Improvements have been made in some bakehouses, particularly in rural districts, and their regular limewashing has been insisted on; other workshops and workplaces appear to have been kept under efficient observation.

DAVENTRY BOROUGH.—“ One defect in sanitary accommodation was reported and remedied: one bakehouse is unsatisfactory, and the necessary steps have been taken to remedy this.”

DESBOROUGH URBAN.—“ Although those responsible have
 “ on all occasions shown a readiness to carry out loyally the
 “ requirements of the Acts relating to these places, insuffi-
 “ ciency of ventilation and the uncleanly state of the water-
 “ closets were as usual prominent among the matters which
 “ called for intervention. . . . With one exception, where
 “ the dirty condition was remedied after pressure being brought
 “ to bear upon the occupier by your Inspector, all the
 “ bakehouses were favourably reported upon.”

KETTERING URBAN.—In the inspection of factories and
 workshops, “ 61 defects were found, and all of them remedied.”
 In regard to out-workers’ premises, “ as a result of these
 “ inspections, 16 of the premises were found to require
 “ cleansing and the necessary work was carried out.”

RAUNDS URBAN.—It is stated that no prosecutions were
 necessary, but that “ fourteen written notices were served
 “ on factory owners, and one each on workshops and work-
 “ places.”

ROTHWELL URBAN.—“ In the few cases where defects
 “ were noted, steps were taken to have them rectified.”

WELLINGBOROUGH URBAN.—In regard to bakehouses,
 “ the commonest defect was the need for lime-washing.”

BRACKLEY RURAL.—“ The bakehouses have been inspected
 “ as usual and found satisfactory. I have been able to obtain
 “ very considerable improvements of late years in the matter
 “ of general cleanliness, and there is now hardly a bad floor
 “ in the district.”

BRIXWORTH RURAL.—In regard to bakehouses, there was
 “ one complaint for bad drain, which has been abated.”

HARDINGSTONE RURAL.—“ One bakehouse was re-floored.”

NORTHAMPTON RURAL.—One bakehouse had a defective ceiling.

THRAPSTON RURAL.—“ I visited the two heel workshops “ at Ringstead, and drew attention to the want of cleanliness.
 “ . . . The Factory Inspector drew attention to the want
 “ of proper sanitary convenience at Brigstock, and two new
 “ water-closets were ordered.”

FOOD INSPECTION AND ADULTERATION.

The outlook which was kept during the year on food exposed for sale was productive of good results, and I am glad to note that there is an increasing tendency on the part of butchers to invite inspection of doubtful carcasses by local officers. The amount of meat thus surrendered was about equal to that which was seized and condemned. There were, however, not many other seizures of food than meat made during the year; but there appears, nevertheless, to have been active watchfulness for decayed fruit and other decomposing commodities.

Under the Sale of Foods and Drugs Acts, the administration of which is under the direction of the Public Health, Housing, and Local Government Committee of the County Council, the inspectors submitted for analysis 321 samples, as compared with 295 samples in the year 1912, and 271 samples in 1911.

The following is the Annual Report of the County Analyst on the samples submitted to him :—

SALE OF FOOD AND DRUGS ACTS, 1875 TO 1899.

The following is a list of the samples submitted under the above Acts in the year 1913 :—

Milk	...	...	...	...	...	257
Skimmed Milk	...	...	...	...	...	39
Butter	...	...	...	...	...	2
Margarine	...	...	...	...	...	5
Jam	...	...	...	...	...	5
Whisky	...	...	...	...	...	8
Brandy	...	...	...	...	...	2
Rum	...	...	...	...	...	2
Camphorated Oil	...	...	...	...	...	1
						<hr/>
						321
						<hr/>

As will be seen above, the number of samples sent during the past year was 321, the majority of which consisted of Milk.

The total number of samples reported against was 50, corresponding to a percentage of adulteration of 15.6.

Of the 257 samples of Milk, 38—or practically 15 per cent.—were unsatisfactory. 31 samples were deficient in fat, and 6 samples contained added water, or were deficient in solids-not-fat.

In only one sample of milk were preservatives found to be present. In this case Boracic Preservatives equal to 35 grains Boric Acid per gallon were present.

The cases of deficiencies in fat occurred for the most part in the month of May and the beginning of June, the average percentage of fat during the month of May reaching a figure of only 3.03, while the average of 12 samples sent during the first fortnight of June only amounted to 2.89—amongst these, however, was included a sample which had been obviously skimmed and contained only 1.2 per cent. of fat. Informal samples taken in the first week of June contained respectively 4.55, 3.05, 3.30 and 3.35 per cent. of fat, while informal samples taken in November contained 4.30, 4.4., 4.2 and 3.6 per cent. of fat.

The average percentage of fat of the 257 samples (including all the adulterated ones) amounted to 3.42.

No less than 9 of the 39 samples of Skimmed Milk were adulterated, and it would appear that the practice of selling watered milk as skimmed milk is prevalent.

In one instance a sample sold as Skimmed Milk was really a whole milk with considerably over 50 per cent. of added water.

The 2 samples of Butter were genuine, but contained Boracic Preservatives equal to .15 and .31 per cent. Boric Acid respectively, the later sample being one taken informally.

The 5 samples of Margarine contained Boracic Preservatives equal to .35 per cent., .49 per cent., .29 per cent., .29 per cent., and .35 per cent. of Boric Acid.

Of the samples of Spirits, 1, a sample of Whisky, was diluted slightly beyond the legal limit, and 1, a sample described as "Brandy," was not a spirit derived from the grape.

Of the samples of Jam, 1 contained Salicylic Acid in amount less than half a grain to the pound.

(Signed) E. W. VOELCKER,

January 19th, 1914.

County Analyst.

The action which was taken in respect of the samples named as unsatisfactory in the above report may be summarised as follows:—

FINES INFLICTED ON CONVICTIONS.

PROSECUTIONS.	No.	RESULTS.
New Milk : Added water ...	2 ...	(1) Fined £3, and 8/6 costs.
		(2) ,, £2, and 6/- costs.
New Milk : Deficient in fat ...	6 ...	(1) ,, £1, and 6/- costs.
		(2) ,, 15/- inclusive.
		(3) ,, £1, and 6/- costs.
		(4) ,, 10/-, and 6/- costs.
		(5) ,, 11/-, and 6/- costs.
		(6) ,, 10/- inclusive.

PROSECUTIONS.	No.	RESULTS.
Skimmed Milk : Added water...	1 ...	(1) ,, £1, and 6/- costs.
		(2) ,, 15/-, and 8/6 costs.
		(3) ,, £2, and 6/- costs.
		(4) Dismissed.

In addition to these prosecutions, however, warnings were given in fourteen cases where samples had been taken either informally or as control inquiries, and where the deficiencies of non-fatty solids in respect of new and skimmed milk did not completely warrant legal proceedings being taken. The cases of preservatives,—one in milk and one in jam,—were not such as to make it likely that a conviction was required or could be secured.

In regard to the operation of the Public Health (Milk and Cream) Regulations, 1912, it has to be borne in mind that these regulations have for their object the prevention of danger to health, which may arise from the addition of preservatives and other foreign substances to milk and cream, and for this purpose provide that no preservative shall be added to milk, or to cream containing less than 35 per cent. by weight of milk fat, at any stage from the place of production to that of delivery to the purchaser. For the purposes of the administration of the Sale of Food and Drugs Acts in this County, this County is divided into a Southern and a Northern District, to each of which an Inspector is appointed. The Inspector for the Southern District reports that 162 samples of milk were submitted by him for analysis during 1913 under the Food and Drugs Acts, and in no case was a sample reported against by the Public Analyst as containing preservatives. The Inspector for the Northern District reports that 134 samples of milk were analysed, and only one was found to contain a preservative—namely 0.05 per cent. of Boric Acid. A warning was given in this case. While there is at present no known regular trade in preserved cream within the County, or in ordinary cream otherwise than for day by day requirements, care will be continued to be paid by the Inspectors to all circumstances which may indicate

the possible use of preservatives in cream, and watchfulness exercised in respect of the labelling of preserved cream as provided for in the Schedule to the Regulations.

The following extracts from the reports of the District Medical Officers of Health relate to the seizure of food unfit for consumption:—

HIGHAM FERRERS BOROUGH.—“The carcase of a steer
“was seized and found to be suffering from general tuber-
“culosis, and it was therefore destroyed. Legal proceedings
“were taken against two butchers concerned, a conviction
“was obtained, and heavy penalties were imposed.”

IRTHLINGBOROUGH URBAN.—“A quantity of tinned food
“was surrendered and destroyed.”

KETTERING URBAN.—Food seized and condemned amounted to 819 lbs. of meat and 346 lbs. of fish, while, of articles surrendered for destruction, there were 316 lbs. of meat, 5-6lbs. of fruit, twelve loaves of bread and two tins of condensed milk.

RUSHDEN URBAN.—There was seizure “of some of the
“internal organs of a tuberculous carcase condemned at
“Higham Ferrers. These were offered for sale in this dis-
“trict, and were seen and condemned by me as unfit for
“human consumption.” The Sanitary Inspector holds a certificate as an Inspector of Meat and other Foods.

WELLINGBOROUGH URBAN.—“In one case a carcase of
“tuberculous beef was found exposed for sale, and was seized
“and destroyed. No prosecution, however, took place.
“The total quantity of unsound meat destroyed during the
“year was 2 tons 6 cwt.”

CRICK RURAL.—“The carcase of a heifer at Crick was

“ voluntarily surrendered. It was found to be in an advanced
 “ stage of tuberculosis and was condemned and destroyed.
 “ No other cases of diseased meat have been found.”

DAVENTRY RURAL.—“ 506 lbs. of meat which was unfit
 “ for human food was voluntarily given up and destroyed,
 “ no meat was seized as unfit for human food, and no prosecu-
 “ tion took place. . No other unwholesome food has
 “ been found exposed for sale in any part of the district.”

HARDINGSTONE RURAL.—“ The slaughter-houses were
 “ mostly visited when slaughtering was in progress; only
 “ one doubtful case was found, and most of the carcass was
 “ allowed to be sold, the remainder being destroyed.”

OUNDLE RURAL.—The Sanitary Inspector reports “ One
 “ seizure of meat took place, a prosecution followed, and the
 “ butcher was fined. This has no doubt done good in the
 “ district, as since then I have been many times called in
 “ to inspect doubtful carcasses of meat, and two carcasses
 “ of mutton have been voluntarily surrendered.”

BYE-LAWS.

It will be seen in the following references from the reports of the Medical Officers of Health, that there is a growing desire on their part for the framing or revision of bye-laws—chiefly in respect of buildings—for their districts, in view of the increasing demands of public health administration :—

DESBOROUGH URBAN.—“ The revision of the Bye-Laws has
 “ been referred to a special committee, and is still under
 “ consideration.”

IRTHLINGBOROUGH URBAN.—“ The bye-laws relating to
 “ building have been modified to some extent—as suggested
 “ and sanctioned by the Local Government Board.”

WELLINGBOROUGH URBAN.—“ The bye-laws of the district dealing with the erection of houses, etc., were drawn up in 1859. Comment is needless.”

OUNCLE RURAL.—The Building “ bye-laws suggested by the Local Government Board for Rural Districts were carefully gone through and adopted, subject to some slight alterations, and are now waiting the approval of the Board.”

OXENDON RURAL.—With reference to the abandonment of the bye-laws by the Council, after their submission to the Local Government Board when they were considerably altered, correspondence has ensued between the Board and the Council, and “ the matter is still under consideration.” It is felt to be “ better to have no bye-laws at all than to have a mere collection of printed matter incapable of being enforced and openly winked at.”

THRAPSTON RURAL.—“ I have advised that building bye-laws were required for the District, and the matter is also under consideration.”

WELLINGBOROUGH RURAL.—“ I understand there are no bye-laws for the Rural District, other than for Irchester and Great Doddington, and I think the time has now arrived when your Council should consider the question of providing bye-laws and regulations for the building of new premises, the regulation of milk supply, bake-houses, slaughter-houses, offensive trades, &c.”

CHARLES E. PAGET,

County Medical Officer of Health.

County Hall, Northampton.

May, 1914.

LIST OF MEDICAL OFFICERS OF HEALTH AT COMMENCEMENT OF 1914.

DISTRICT.	MEDICAL OFFICER OF HEALTH.	RESIDENCE.
URBAN :—		
Brackley (Borough)	G. N. Stathers, M.R.C.S., D.P.H.	Brackley
Daventry (Borough)	C. H. Sedgwick, M.B. ...	Weedon
Higham Ferrers (Borough)	... F. D. Crew, M.B. ...	Higham Ferrers
Desborough	... H. Gibbons, M.D. ...	Desborough
Finedon	... H. Burland, M.R.C.S. ...	Finedon
Irthlingborough	... W. Robb, M.B., J.P. ...	Irthlingborough
Kettering	... J. Allison, M.D., D.P.H. ...	Kettering
Oundle	... B. R. Turner, M.D. ...	Oundle
Raunds	... W. Mackenzie, L.R.C.P. ...	Raunds
Rothwell	... J. More, M.R.C.S. ...	Rothwell
Rushden	... H. S. Baker, M.R.C.S. ...	Rushden
Wellingborough	... J. Arthur, M.D. ...	Wellingborough
RURAL :—		
Brackley	... G. N. Stathers, M.R.C.S., D.P.H.	Brackley
Brixworth	... R. Winterbotham, M.R.C.S. ...	Brixworth
Crick	... A. G. L. Smith, M.R.C.S. ...	Crick
Daventry	... A. R. Darley, M.D. ...	West Haddon
Easton-on-the-Hill	T. P. Greenwood, M.R.C.S. ...	Stamford
Gretton	... J. E. O'Connor, M.D., D.P.H. ...	Kirby Muxloe, Leicester
Hardingstone	... G. H. Percival, M.B. ...	Northampton
Kettering	... L. W. Dryland, M.R.C.S., D.P.H.	Kettering
Middleton Cheney	J. I. Johnson, L.R.C.P. ...	Culworth, Banbury
Northampton	... G. H. Percival, M.B. ...	Northampton
Oundle	... C. N. Elliott, M.B., J.P. ...	Oundle
Oxendon	... C. T. Scott, M.B. ...	Market Harborough
Potterspury	... C. Powell, M.B. ...	Stony Stratford
Thrapston	... C. N. Elliott, M.B., J.P. ...	Oundle
Towcester	... C. Simpson, M.B. ...	Towcester
Wellingborough	... J. Arthur, M.D. ...	Wellingborough

SUMMARY OF REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
BRACKLEY BOROUGH.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Abolition of midden-closets.</p> <p>(d) Intended provision of cottages by the Borough Council.</p> <p>(e) Appreciation of the work of the Health Visitor</p>
DAVENTRY BOROUGH.	<p>(a) Rather high general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness, but epidemic of measles.</p> <p>(c) Disinfecting apparatus required.</p> <p>(d) The water supply proved sufficient, in spite of the requirements of from 2,000 to 3,000 soldiers during the Army Manœuvres.</p>
HIGHAM FERRERS BOROUGH.	<p>(a) Rather high general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness, but epidemic of measles.</p> <p>(c) Scheme prepared for remodeling the sewage disposal works.</p> <p>(d) Covered bins for refuse becoming more general.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
DESBOROUGH URBAN.	<p>(a) High general and infantile mortalities.</p> <p>(b) Moderate amount of notifiable sickness, but epidemics of measles and influenza.</p> <p>(c) Joint Isolation Hospital and Disinfector with Rothwell Urban District recommended.</p> <p>(d) Flushing apparatus to all Water Closets urged.</p> <p>(e) New sewage disposal works completed.</p>
FINEDON URBAN.	<p>(a) High general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Flushing of dead ends of water mains recommended.</p> <p>(d) Proper receptacles for house refuse still much required.</p>
IRTHLINGBOROUGH URBAN.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Some scarcity of houses for working classes.</p> <p>(d) More attention to flushing of drains required.</p>
KETTERING URBAN.	<p>(a) Low general, but high infantile, mortality.</p> <p>(b) Considerable prevalence of scarlet fever and diphtheria.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
KETTERING URBAN (continued).	<p>(c) Public Disinfecting Station in course of erection.</p> <p>(d) Enlargement of Isolation Hospital recommended.</p>
OUNDLE URBAN.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness, but prevalence of whooping cough.</p> <p>(c) A new engine and air-compressor installed at the sewage disposal works.</p> <p>(d) Proper galvanised bins for house refuse required.</p>
RAUNDS URBAN.	<p>(a) Rather high general and infantile mortalities.</p> <p>(b) Some prevalence of scarlet fever.</p> <p>(c) Prospective removal of Isolation Hospital to better site.</p> <p>(d) Satisfactory working of the new sewage disposal works.</p> <p>(e) New public water supply continues to be satisfactory.</p>
ROTHWELL URBAN.	<p>(a) Low general, but high infantile, mortality.</p> <p>(b) Prevalence of scarlet fever and diphtheria, also epidemics of measles and influenza.</p> <p>(c) Bacteriological and chemical examinations of public water supply proved satisfactory.</p> <p>(d) Considerable inspection of house property.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
RUSHDEN URBAN.	<p>(a) Low general, and fair infantile, mortality.</p> <p>(b) Considerable prevalence of scarlet fever and epidemic of measles.</p> <p>(c) The building of workmen's dwellings about to be undertaken by the District Council.</p> <p>(d) Covered carts for the collection of house refuse recommended.</p> <p>(e) New sewage disposal works nearly completed.</p>
WELLINGBOROUGH URBAN.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Considerable prevalence of scarlet fever, and epidemic of measles.</p> <p>(c) Increased hospital accommodation recommended.</p> <p>(d) Flushing cisterns to all water-closets recommended.</p> <p>(e) Veterinary inspection of dairy cows needed.</p>
BRACKLEY RURAL.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Great improvement in the structure and cleanliness of dairies and cowsheds recorded.</p> <p>(d) Considerable works of drainage being carried out in several villages.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
BRIXWORTH RURAL.	<p>(a) Low general, but only fair infantile, mortality.</p> <p>(b) Prevalence of scarlet fever and diphtheria, and epidemics of measles and whooping cough.</p> <p>(c) Completion of Isolation Hospital.</p> <p>(d) Some building taking place.</p>
CRICK RURAL.	<p>(a) Low general, but only fair infantile, mortality.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Difficulty of obtaining suitable site for erection of cottages at Crick.</p>
DAVENTRY RURAL.	<p>(a) Fair general and infantile mortalities.</p> <p>(b) Some prevalence of scarlet fever, and epidemic of measles.</p> <p>(c) New Isolation Hospital nearing completion.</p> <p>(d) Sewage Disposal Works at Weedon nearing completion, and schemes required for Long Buckby and Braunston.</p>
EASTON-ON-THE-HILL RURAL.	<p>(a) High general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Better means for disinfection of clothing and bedding required.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
GRETTON RURAL.	<ul style="list-style-type: none"> (a) Low general, but high infantile, mortality. (b) Small amount of notifiable sickness. (c) Sewage treatment required at Rockingham, Wakerley, and Gretton. (d) Workmen's dwellings required at Gretton.
HARDINGSTONE RURAL.	<ul style="list-style-type: none"> (a) High general, and rather high infantile, mortalities. (b) Some prevalence of scarlet fever and measles. (c) Special attention paid to the housing problems in the district. (d) Progress made with schemes of sewage disposal.
KETTERING RURAL.	<ul style="list-style-type: none"> (a) Low general and infantile mortalities. (b) Some prevalence of scarlet fever, but very few cases of measles or whooping cough. (c) Building schemes recommended and under consideration. (d) New sewerage scheme for Corby commenced.
MIDDLETON CHENEY RURAL.	<ul style="list-style-type: none"> (a) Fair general, but low infantile, mortality. (b) Some prevalence of scarlet fever and influenza. (c) Extension of sewers in certain villages. (d) Systematic inspection of dwellings.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
NORTHAMPTON RURAL.	<p>(a) Rather high general, but low infantile, mortality.</p> <p>(b) Some prevalence of scarlet fever and measles.</p> <p>(c) Scavenging scheme for three villages decided on.</p> <p>(d) Moderate amount of building in the district.</p> <p>(e) Improvements in water supply.</p>
OUNDLE RURAL.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Epidemic of scarlet fever at Benefield, and outbreak of measles at Lutton.</p> <p>(c) Extension of Isolation Hospital in hand.</p> <p>(d) The building of cottages by the Council recommended in certain villages.</p> <p>(e) Water supply to King's Cliffe completed, but sewerage system required.</p>
OXENDON RURAL.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness, but epidemics of whooping cough and chicken pox.</p> <p>(c) Large amount of house inspection.</p> <p>(d) Some sewerage work carried out, and also recommended.</p> <p>(e) Bye-laws still under consideration.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
POTTERS PURY RURAL.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness.</p> <p>(c) Schemes for water supply at Potterspury and Old Stratford in hand.</p>
THRAPSTON RURAL.	<p>(a) Fair general, and rather high infantile, mortality.</p> <p>(b) Some prevalence of scarlet fever.</p> <p>(c) The purchase of a disinfecter urged.</p> <p>(d) Scheme for water supply at Thrapston recommended.</p> <p>(e) Building bye-laws recommended.</p>
TOWCESTER RURAL.	<p>(a) Rather high general and infantile mortalities.</p> <p>(b) Small amount of notifiable sickness, but epidemic of measles.</p> <p>(c) Cottages built by the District Council completed at Towcester.</p> <p>(d) Scheme of sewage disposal at Greens Norton nearing completion.</p> <p>(e) Extension of water supply at Stoke Bruerne in hand.</p>
WELLINGBOROUGH RURAL.	<p>(a) Fair general and infantile mortalities.</p> <p>(b) Prevalence of scarlet fever and diphtheria.</p> <p>(c) The water supplies of Grendon and Great Harrowden in need of attention.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
WELLINGBOROUGH RURAL (continued).	(<i>d</i>) Improvement of sewerage required at Wollaston and Bozeat, as well as at Irchester. (<i>e</i>) Bye-laws for the District recommended. (<i>f</i>) Veterinary inspection of dairy cows urged.

APPENDIX I.

REPORT OF THE CHIEF TUBERCULOSIS OFFICER FOR THE YEAR 1913.

As Medical Adviser to the Northamptonshire Insurance Committee, much medical work has been carried out.

During the year ended the 31st December, 1913, 323 patients made application for Sanatorium Benefit. These patients were visited and examined, and were recommended to the Insurance Committee for the form of treatment considered suitable in each case.

Besides the actual applicants for Sanatorium Benefit, 90 other Tuberculous patients were visited and examined, making a total of 413 patients who have been dealt with.

A number of the above-mentioned 90 patients were neither Insured Persons, nor the Dependants of Insured Persons, and were therefore not eligible for Treatment by the Insurance Committee. Others were patients, whom it was considered did not require active treatment.

MEDICAL WORK.

Whilst visiting a patient, so far as was possible, the other members of the family were examined for signs of Tuberculosis.

TABLE I.

NAME OF DISTRICT.	TUBERCULAR.		Applications for Sanatorium Benefit.	Number of Visits.	CONTACTS.				Total Number of Visits.
	Pulmonary.	Other.			Tubercular.	Suspects.	Non-Tubercular.	No. of Visits to Contacts.	
KETTERING URBAN	127	18	120	554	10	27	32	69	623
KETTERING RURAL	12	1	11	20	1	4	7	12	32
WELLINGBOROUGH URBAN	20	1	16	28	...	1	9	10	38
WELLINGBOROUGH RURAL	19	3	19	34	11	2	5	18	52
FINEDON URBAN	7	1	5	8	2	3	3	8	16
NORTHAMPTON RURAL	3	...	2	4	...	2	...	2	6
BRIXWORTH RURAL	17	1	17	31	2	3	3	8	39
HARDINGSTONE RURAL	5	...	5	5	2	2	5	9	14
RUSHDEN URBAN	42	2	35	65	6	8	10	24	89
HIGHAM FERRERS BOROUGH	5	...	3	10	1	...	...	1	11
IRTHLINGBOROUGH URBAN	37	2	23	73	10	13	5	28	101
DESBOROUGH URBAN	3	1	2	5	...	1	1	2	7
ROTHWELL URBAN	2	...	1	2	...	...	1	1	3
OXENDON RURAL	2	...	2	2	...	...	...	...	2
OUNCLE URBAN	5	...	5	8	1	5	5	11	19
OUNCLE RURAL	5	...	3	5	...	2	7	9	14
GRETTON RURAL ... ..	...	...	...	...	...	...	...	...	...
EASTON-ON-THE-HILL RURAL	2	...	1	2	1	...	...	1	3
THRAPSTON RURAL	16	4	10	21	...	1	3	4	25
RAUNDS URBAN	21	...	16	30	4	4	5	13	43
DAVENTRY BOROUGH	3	...	2	5	...	...	...	...	5
DAVENTRY RURAL	12	1	12	22	...	1	5	6	28
CRICK RURAL	1	...	1	1	...	1	...	1	2
TOWCESTER RURAL	5	...	5	5	1	1	1	3	8
POTTERS PURY RURAL	4	...	4	5	...	...	...	...	5
BRACKLEY BOROUGH	1	...	1	1	...	...	...	...	1
BRACKLEY RURAL	2	...	2	3	...	...	1	1	4
MIDDLETON CHENEY RURAL ... ..	...	...	...	...	...	...	...	...	...
TOTALS	378	35	323	949	52	81	108	241	1,190

At times great difficulty was experienced in persuading workers to submit to such examinations, as they were unwilling to leave work for this purpose. To obviate this difficulty, as many examinations as possible have been made during their dinner hour. In the case of school children, the parents were, on the whole, anxious and willing to have their children examined.

It may be interesting to note a case illustrative of uses of the examination of Contacts.

In one instance during the examination of 4 Contacts, 2 new cases of Tuberculosis were discovered. One was a fairly advanced case, whilst the other was a comparatively early one. Both were girls under the age of 14. In the advanced case the disease has steadily become worse, and the girl is doomed. The other case is now receiving Institutional Treatment, and is doing well.

In a large number of cases similar results have been obtained.

A Table (1) is attached showing :—

1. That 413 Tuberculous patients were visited and examined during the year. 378 of these patients were suffering from Pulmonary Tuberculosis, and 35 were suffering from Tuberculosis of other parts of the body. The Table further shows how the numbers were distributed in the various districts.

2. That 323 patients applied for Sanatorium Benefit, and further the distribution of these patients.

3. That 949 visits, or attendances, were made to these patients.

4. That 241 Contacts were examined, and of these, 52 were Tuberculous, 81 were Suspects, and 108 were Non-Tuberculous. The Table also shows how these Contacts were distributed in the County.

5. That 241 visits, or attendances, were made on these Contacts.

6. That 1,033 visits, or attendances, were made in all during the year. How these visits were distributed is also shown.

It may be interesting to note in passing that, in making visits since the 25th July, 1913, 4,340 miles have been travelled in the Motor Car supplied by the County Council for this purpose.

SEX AND AGE INCIDENCE OF TUBERCULOSIS.

It will be seen by Table (2) how the 378 cases suffering from Pulmonary Tuberculosis, and the 35 cases suffering from Tuberculosis of other parts of the body, were distributed in the various age groups.

It is very striking that the incidence of Pulmonary Tuberculosis, as evidenced by this Table, is highest in the 15-25, and 25-35 age periods. These are the early years of working life, and one cannot but feel that the work has something to do with the prevalence of the disease at these ages. It may not be so much the conditions under which the work is carried out as the actual stress of the work itself. A glance at the Table will show that the disease is more prevalent among females than among males at these ages. With the females a new factor obtains, for these ages are also the early years of married life, when the additional burden of Motherhood is thrown upon them. Further it is the lot of the young employed married woman to care for the home after the day's work in the Factory is over.

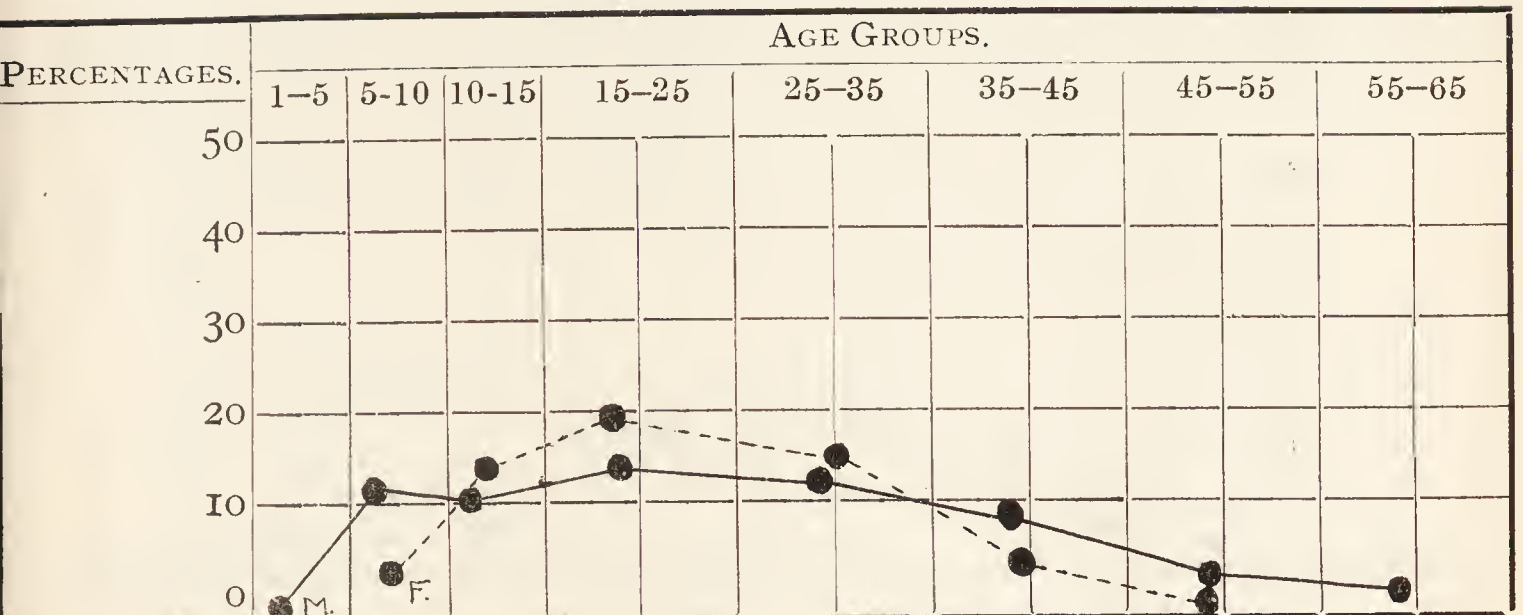
These facts are well shown in Tables (3) and (4), where the percentage incidence of the disease at the various age periods are shown graphically.

The facts already mentioned are even more prominently

TABLE II.

AGE.	1 to 5.			5 to 10.			10 to 15.			15 to 25.			25 to 35.			35 to 45.			45 to 55.			55 to 65.			TOTALS.		
SEX.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.
Pulmonary Tuberculosis	3	...	3	22	14	36	20	23	43	56	70	126	46	53	99	32	15	47	11	7	18	6	...	6	196	182	378
Other Forms of Tuberculosis	...	4	4	4	7	11	3	1	4	1	7	8	1	2	3	...	2	2	2	1	3	...	...	...	11	24	35
TOTAL	...	3	4	7	26	47	23	24	47	57	77	134	47	55	102	32	17	49	13	8	21	6	...	6	207	206	413

TABLE 3.
 DIAGRAM SHOWING
 PERCENTAGES OF TOTAL CASES OF BOTH SEXES
 SUFFERING FROM
 PULMONARY TUBERCULOSIS
 IN THE VARIOUS AGE GROUPS.



REFERENCE : MALES—————
 FEMALES-----

TABLE 4.
 DIAGRAM SHOWING
 PERCENTAGES OF TOTAL CASES SUFFERING FROM
 PULMONARY TUBERCULOSIS
 IN THE VARIOUS AGE GROUPS.

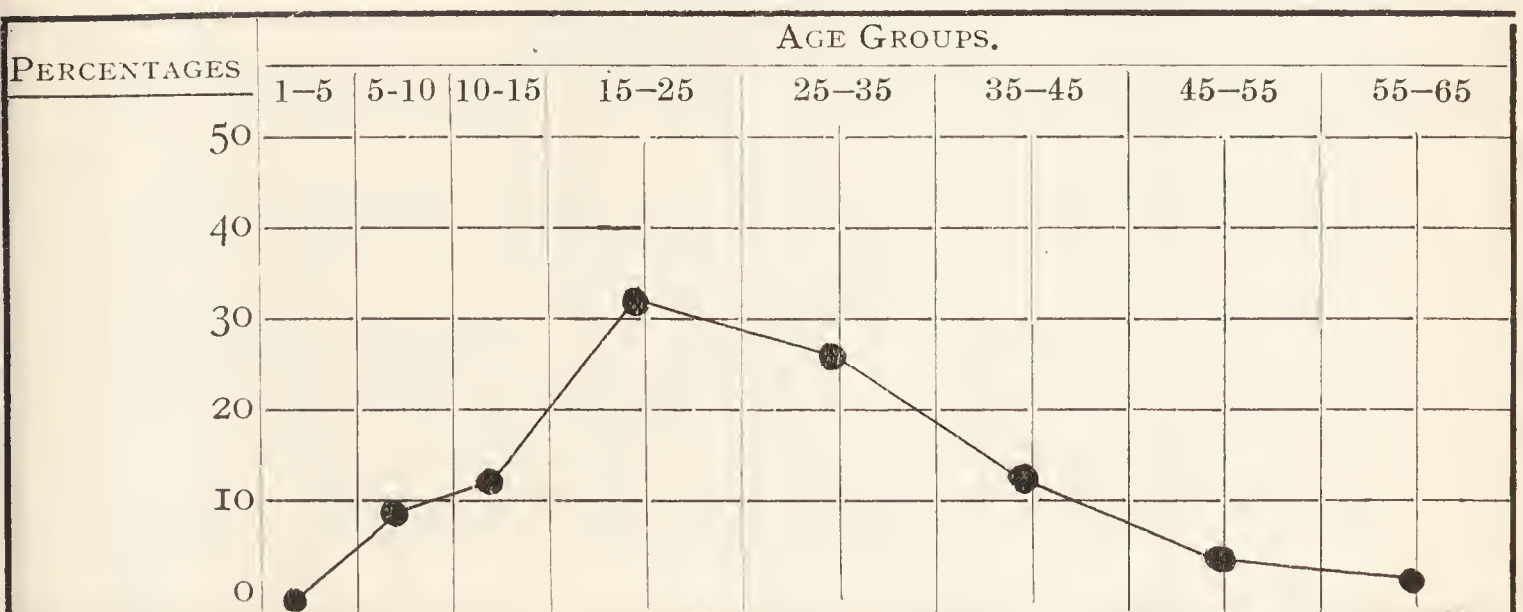
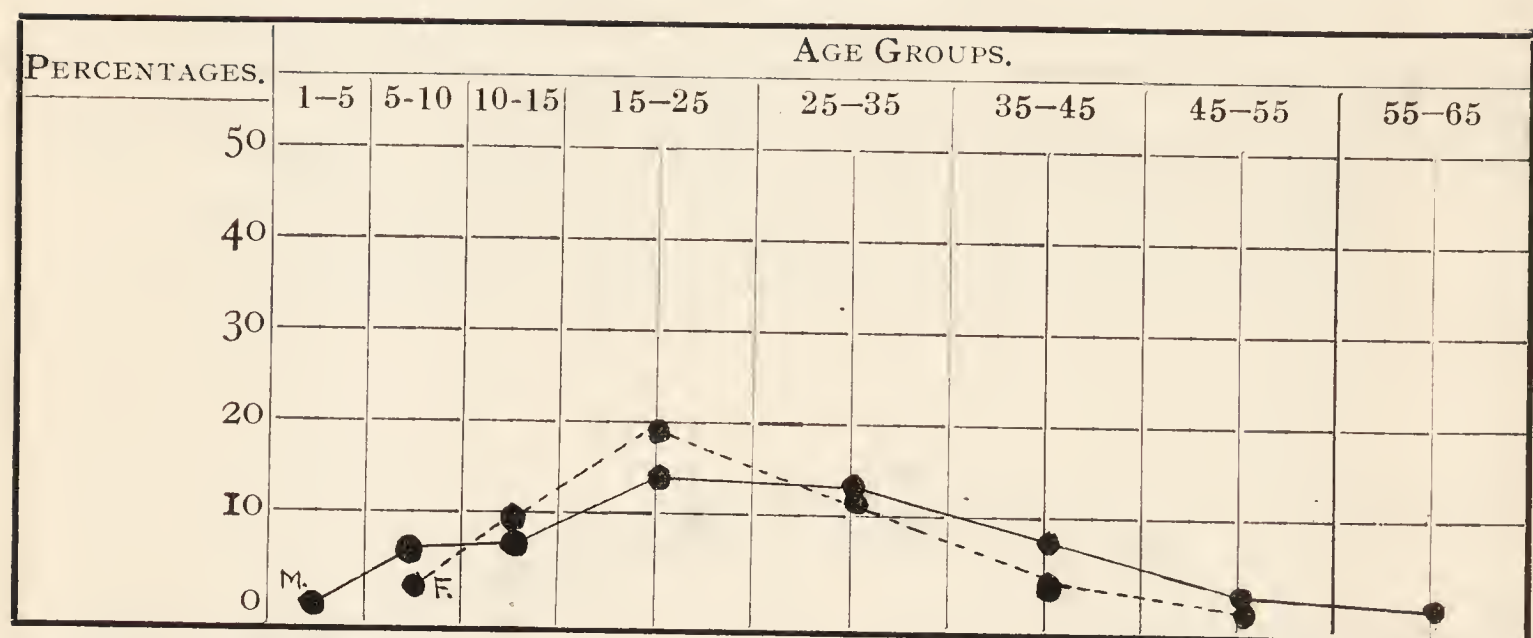
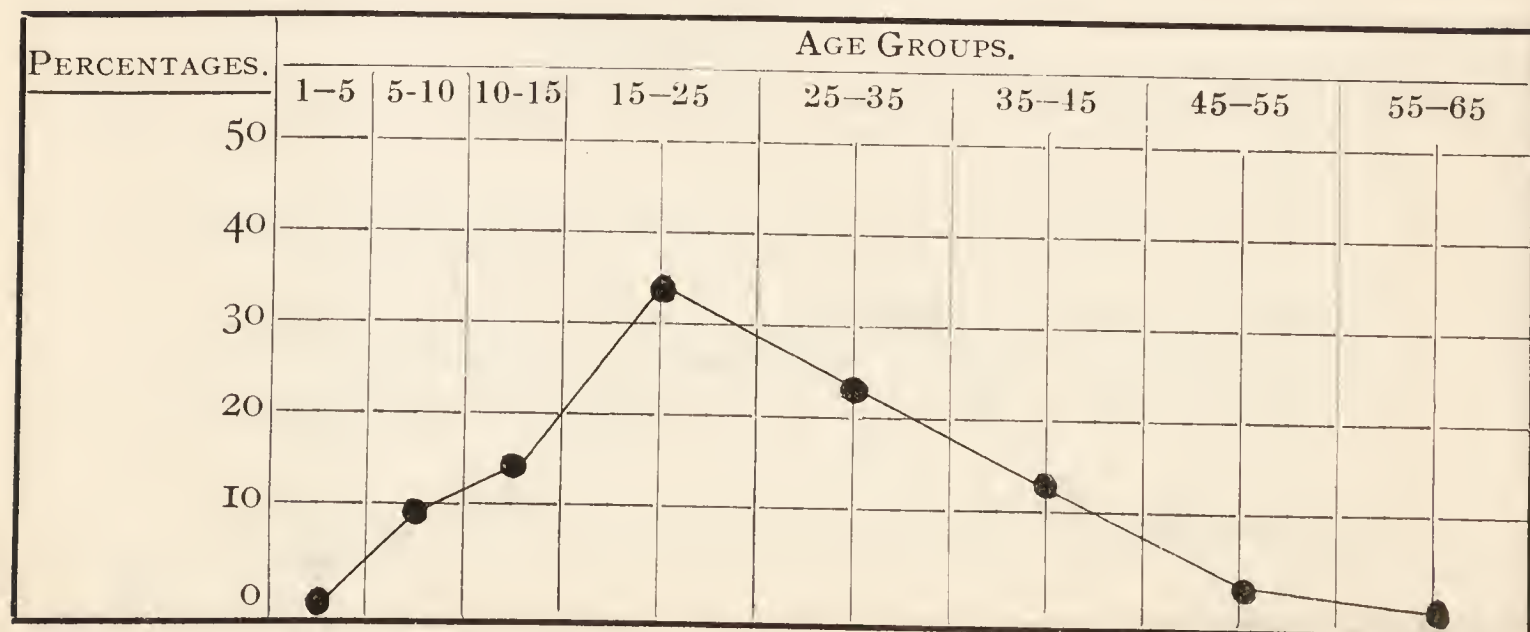


TABLE 5.
 DIAGRAM SHOWING
 PERCENTAGES OF CASES OF BOTH SEXES SUFFERING FROM
 PULMONARY TUBERCULOSIS
 IN THE VARIOUS AGE GROUPS.
 KETTERING, WELLINGBOROUGH, RUSHDEN, IRTHLINGBOROUGH,
 AND RAUNDS.



REFERENCE : MALES—————
 FEMALES-----

TABLE 6.
 DIAGRAM SHOWING
 PERCENTAGES OF TOTAL CASES SUFFERING FROM
 PULMONARY TUBERCULOSIS
 IN THE VARIOUS AGE GROUPS.
 KETTERING, WELLINGBOROUGH, RUSHDEN, IRTHLINGBOROUGH,
 AND RAUNDS.



THE ABOVE TABLES DEAL WITH 247 OR 65.3% OF THE TOTAL
 378 CASES SUFFERING FROM PULMONARY TUBERCULOSIS.

brought out when one deals only with Urban populations like Kettering, Wellingborough, Rushden, Irthlingborough, and Raunds. This is shown graphically in Tables (5) and (6).

TREATMENT.

323, or 78.2% of the 413 patients visited and examined during the year, have received treatment from the Northamptonshire Insurance Committee.

The cases so treated may be divided into two great classes, viz. :—

1. Insured persons.
2. Dependants of Insured persons.

The forms of treatment which may be received by the applicants for Sanatorium Benefit are :—

- (a) Sanatorium Treatment.
- (b) Domiciliary Treatment.
- (c) Dispensary Treatment.
- (d) Hospital Treatment.

A Table (7) is attached showing how the various forms of treatment were given to the applicants for Sanatorium Benefit.

TABLE 7.

FORM OF TREATMENT.	INSURED.			DEPENDANTS.			TOTAL.
	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	
SANATORIUM ...	39	12	51	2	1	3	54
DOMICILIARY ...	72	63	135	31	68	99	234
DISPENSARY ...	18	14	32	1	1	2	34
HOSPITAL ...	...	...	...	1	...	1	1
TOTAL ...	129	89	218	35	70	105	323

It is satisfactory to note that, in spite of the scarcity of Sanatorium beds in the County, 54 patients have received this form of treatment.

The Sanatoria to which patients were sent are as follows :—

1. The Northamptonshire Sanatorium, Creton.
2. The Zetland Sanatorium, Norfolk.
3. The Royal National Sanatorium, Bournemouth.
4. The Royal National Hospital for Consumption, Ventnor, Isle of Wight.

Great care has been taken in selecting, for Sanatorium Treatment, cases which are really suitable for such treatment, and in whom there is reason to look for permanent benefit. In a number of instances difficulty has been experienced in convincing patients, and their interested friends, that they (the patients) are not suitable cases for Sanatorium Treatment. An impression is held by many that because an Insured Person suffers from Pulmonary Tuberculosis, no matter in what degree, he has a right to Sanatorium Treatment whether he be a suitable case or not. It is unfortunate that such an impression exists, for it makes it exceedingly hard to refuse a patient the one Treatment he has set his mind on. It should be noted that Sanatorium Treatment is intended for those in whom the Disease is in an early stage, and where a reasonable hope exists for their permanent benefit.

Patients recommended for their form of Treatment, have, on the whole, been willing and anxious to avail themselves of it.

DOMICILIARY TREATMENT.

The great bulk—234—of the applicants for Sanatorium Benefit, received this form of Treatment.

Domiciliary Treatment means that the patients were treated in their own homes by their own Medical men.

The reasons for this number being so large are :—

- (a) That in the early part of the year, Sanatorium accom-

modation was limited, especially with regard to that for female patients.

(b) That only one Dispensary—at Kettering—has been in working order, and that, only since the 8th July, 1913.

DISPENSARY TREATMENT.

Since the 8th July, 1913, this form of Treatment has been given at the Temperance Hall, Kettering, where two rooms were rented until the alterations at the Dispensary were completed.

The number of patients attending regularly for treatment has steadily increased during the latter part of the year, and in December 34 patients were being looked after solely by the Dispensary. Besides these, a considerable number of patients have attended for occasional examinations. Since the 8th July, 1913, the total number of visits made by patients to the Dispensary was 358.

This number includes visits paid by the Tuberculosis Officer to the homes of the patients, who were under the care of the Dispensary, and who were unable to attend at that Institution.

The After-care of patients returning from the Sanatorium, is as far as possible undertaken by the Dispensary. The patients come up periodically to report themselves for examination.

HOSPITAL TREATMENT.

Only one case received this form of Treatment.

Hospital Treatment is intended for patients requiring Surgical Treatment.

The above patient was admitted to Hospital in the ordinary way by "letter."

None of the Hospitals in the County are "approved" by the Local Government Board for the Treatment of Tuber-

culosis, therefore the Insurance Committee is unable to send patients to them.

The Northampton General Hospital Authorities have been approached with a view to that Institution becoming Approved, in order that patients may be sent there.

RESULTS OF TREATMENT.

While the results of treatment, as shown in the following Tables, are instructive, they can by no means be taken as the ultimate results, for the cases have not yet stood the test of time.

SANATORIUM TREATMENT.

It is extremely satisfactory to note that, of the 33 patients who left the Sanatorium, 23, or 69.6%, are fit for work. It is to be hoped that an even better result than this will be obtained when more adequate Sanatorium arrangements have been made.

The results of this form of Treatment are shown in detail, in the following Table (8).

TABLE 8.

	INSURED.			DEPENDANTS.			TOTAL.
	Male.	Female.	Both Sexes.	Male.	Female	Both Sexes.	
1. NUMBER DISCHARGED							
(a). Fit for Work...	16	5	21	2	...	2	23
(b). Improved ...	5	2	7	...	...	...	7
(c). Unimproved ...	1	...	1	...	...	...	1
(d). Worse ...	...	...	...	...	...	...	...
2. DEAD ...	2	...	2	...	...	...	2
3. STILL UNDER TREATMENT ...	15	5	20	...	1	1	21
4. TOTAL ...	39	12	51	2	1	3	51

DOMICILIARY TREATMENT.

The results of Treatment in this Class are purely tentative, as most of the patients are still under treatment, even those who are at work.

Detailed results are shown in Table (9).

TABLE 9.

	INSURED.			DEPENDANTS.			TOTAL.
	Male	Female	Both Sexes.	Male	Female.	Both Sexes.	
FIT FOR WORK ...	19	18	37	7	11	18	55
IMPROVED ...	19	23	42	17	34	51	93
UNIMPROVED ...	17	10	27	1	7	8	35
WORSE ...	2	5	7	1	6	7	14
DEAD ...	14	6	20	3	10	13	33
GONE AWAY ...	1	1	2	2	...	2	4
TOTAL ...	72	63	135	31	68	99	234

DISPENSARY TREATMENT.

The results obtained by the Kettering Temporary Dispensary, considering the short time it has been at work, are very satisfactory, for 7, or 20.5% of the patients treated, are at work. This is an encouraging result, when one takes into consideration the fact that all classes of cases are undergoing treatment. It should, however, be noticed that many of these cases are still under the care of the Dispensary.

The details of Treatment are shown in Table (10).

TABLE 10.

	INSURED.			DEPENDANTS.			TOTAL.
	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.	
FIT FOR WORK ...	6	1	7	...	...	...	7
IMPROVED ...	9	12	21	1	1	2	23
UNIMPROVED ...	...	...	...	...	...	...	...
WORSE ...	...	...	...	...	...	...	...
DEAD ...	...	...	...	...	...	...	...
GONE AWAY ...	3	1	4	...	...	...	4
TOTAL ...	18	14	32	1	1	2	34

HOSPITAL TREATMENT.

The one case receiving this form of Treatment is progressing satisfactorily.

PATIENTS NOT RECEIVING SANATORIUM BENEFIT.

Of the 90 patients who were visited, and who were not receiving Sanatorium Benefit, 6 have died.

OLIVIER A. J. N. MURISSET.

APPENDIX II.

PUBLIC HEALTH, HOUSING, AND LOCAL GOVERNMENT
COMMITTEE.

4th APRIL, 1914.

REPORT ON THE WORK OF THE HEALTH VISITORS FROM
JANUARY 1ST, 1913, to DECEMBER 31ST, 1913.

The work of the Health Visitors, during the year 1913, was carried out in connection with the feeding, clothing, and general up-bringing of infants until the age of twelve months in the four undermentioned areas:—

HEALTH VISITORS	DISTRICTS UNDER SUPERVISION.
Mrs. Curtis District No. 1	Brackley Borough, Brackley and Middleton Cheney Rural Districts, certain parishes in the Daventry Rural District, and one parish in the Towcester Rural District.
Miss Sadler District No. 2	Daventry Borough, and certain parishes in the Crick and Daventry Rural Districts.
Miss Robinson District No. 3.	Certain parishes in the Brixworth and Northampton Rural Districts; one parish each in the Daventry and Wellingborough Rural Districts.
Miss Bown District No. 4.	Irthlingborough and Raunds Urban Districts; certain parishes in the Thrapston Rural District, and one parish in the Kettering Rural District.

The following tabular statements show in convenient form the extent of visitation by the Health Visitors, the condition of the newly-born infants visited, the methods of feeding, and the number of deaths which occurred under the age of twelve months :—

Visits paid by the Health Visitor.	District No. 1.	District No. 2.	District No. 3.	District No. 4.	TOTALS.
To cases previously on books	...	...	...	679	679
„ new cases for first time	240	234	248	355	1,077
„ „ subsequently	1,033	1,760	922	1,766	5,481
By request of Parents ...	113	149	42	50	354
Totals	1,386	2,143	1,212	2,850	7,591

DISTRICTS.	Condition of Infants at Birth.			Method of Feeding.			Hand-Feeding by				Deaths under 1 Year.	Illegitimate Births.
	Good.	Fair.	Weakly	Breast.	Breast Partly.	En- tirely Hand.	Boat- shaped Bottle.	Long- tubed Bottle.	Medi- cine Bottle.	Cup and Spoon.		
No. 1 ...	230	6	4	185	19	36	30	14	...	11	2	8
No. 2 ...	173	43	18	147	49	38	39	29	17	2	7	13
No. 3 ...	204	28	16	150	36	62	63	21	...	14	3	9
No. 4 ...	302	42	11	223	63	69	80	27	...	25	15	6
TOTALS ...	909	119	49	705	167	205	212	91	17	52	27	36

DISTRICTS.	Sickness and Slight Ailments.		Defects pointed out.			
	Advice or Aid given.	Medical Aid Advised.	Food.	Clothing.	Care of Infants.	Cleanliness.
No. 1. ...	42	8	11	18	4	6
No. 2. ...	287	77	180	38	87	62
No. 3. ...	29	23	34	43	12	17
No. 4. ...	42	40	132	21	10	7
TOTALS ...	400	148	357	120	113	92

From the foregoing figures, it will be seen that the work of the Health Visitors was centred mainly on the upbringing of 1,077 newly born infants, and that the best reflection of such work is to be found in the fact that the mortality of the infants was at the rate of only 25 per 1,000 births, as against the rate of 79 per 1,000 births for the Administrative County in the year 1912—the lowest yet recorded. It is very satisfactory to note also that 354 visits, other than routine visits, were paid by the Health Visitors in respect of infants at the special request of parents, and that they advised medical attendance on infants in 148 cases. More than a half of the defects pointed out by the Health Visitors was in regard to the feeding of infants, and it appears, moreover, that in some of the rural parishes there is a difficulty in procuring milk, while there is room for improvement also in many cottages in respect of satisfactory pantry accommodation for keeping milk and other food. I am glad to be able to say that there is certainly a marked improvement in the clothing of infants, which is largely due to the work of Miss Robinson during the past few years, and that woollen instead of cotton clothing next to the skin of infants is much more usually found than formerly. Extreme cases of insufficient ventilation, and

other insanitary conditions of cottages, have been noted and referred to the local Sanitary Inspectors, and it is to be hoped that the movement in the direction of improving housing accommodation in some of the rural districts will reduce the tendency to overcrowding which is liable to occur in cottages having only two bedrooms. It is a matter of regret that, for over two months during the year, Miss Robinson, the Superintendent Health Visitor, was incapacitated through overwork; but I am glad to say that she has made a fair recovery, and that she and the other Health Visitors met with amicable assistance in their duties from medical practitioners, nurses, and midwives generally throughout the areas in which they were employed.

CHARLES E. PAGET,

County Medical Officer of Health.

VITAL STATISTICS DURING 1913.

Table I.

DISTRICTS.	Population estimated to middle of 1913.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS. §		NETT DEATHS BELONGING TO THE DISTRICT.				Death-rate Standard- ized by Factor of Registrar- General.	Area of Districts in Acres.	AT CENSUS OF 1911.		
		Un- corrected Number.	Nett.		Number.	Rate. *	Of Non- Residents Registered in the District.	Of Resi- dents not Registered in the District.	Under One Year of Age.		At all Ages.				Total Population at all Ages.	No. of Inhabited Houses.	Average No. of Persons per House.
			Number.	Rate. *					Number.	Rate per 1,000 Nett Births.	Number.	Rate. •					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
URBAN :—																	
BRACKLEY (BOROUGH)	2,633	51	50	18.9	21	7.9	3	2	1	20.0	20	7.5	6.9	3,489	2,633	605	4.3
DAVENTRY (BOROUGH)	3,517	73	73	20.7	62	17.6	15	11	9	123.2	58	16.1	12.8	3,633	3,516	857	4.1
HIGHAM FERRERS (BOROUGH) ...	2,776	56	56	20.1	31	11.1		4	5	89.2	35	12.6	12.8	1,945	2,726	619	4.4
DESBOROUGH	4,220	92	92	21.8	54	12.7		4	10	108.6	58	13.7	13.8	2,400	4,092	907	4.5
FINEDON	3,782	83	83	21.9	45	11.8		6	9	108.1	51	13.4	13.0	3,661	3,782	818	4.6
IRTHLINGBOROUGH	4,675	106	108	23.1	36	7.7	1	4	5	46.2	39	8.3	8.7	3,722	4,630	988	4.6
KETTERING	30,269	649	649	21.4	330	10.9	28	14	71	109.3	316	10.4	11.2	2,814	29,972	6,254	4.7
OUNDLE	2,749	49	44	16.0	42	15.2	10	3	3	68.1	35	12.7	11.1	2,228	2,749	555	4.9
RAUNDS	3,874	80	81	20.9	45	11.6		6	7	86.4	51	13.1	12.4	4,460	3,873	907	4.2
ROTHWELL	4,720	120	120	25.4	43	9.1	1	5	11	91.6	47	9.9	10.1	3,638	4,416	995	4.4
RUSHDEN	13,752	237	237	17.2	109	7.9		9	19	80.1	118	8.7	9.9	3,777	13,354	2,801	4.7
WELLINGBOROUGH	20,135	407	405	20.1	189	9.3	19	13	28	69.1	183	9.0	8.8	4,265	19,753	4,417	4.4
Totals and Means for Combined URBAN DISTRICTS.	97,102	2,003	1,998	20.57	1,007	10.37	77	81	178	89.03	1,011	10.41	10.61	40,032	95,496	20,723	4.6
RURAL :—																	
BRACKLEY	7,207	132	133	18.1	65	9.0		2	9	67.6	67	9.2	7.1	42,440	7,207	1,869	3.8
BRIXWORTH	11,833	227	226	19.0	157	13.2	21	11	20	88.4	147	12.4	10.3	63,647	11,833	2,964	3.9
CRICK	2,354	45	46	19.5	25	10.6		3	4	86.9	28	11.8	8.9	18,547	2,342	611	3.8
DAVENTRY	13,810	281	282	20.4	162	11.7	1	35	26	92.1	196	11.1	11.7	60,877	13,809	3,451	4.0
EASTON-ON-THE-HILL	1,542	30	30	19.4	21	13.6		5	5	166.6	26	16.8	13.2	6,341	1,542	364	4.2
GRETTON	1,524	24	24	15.7	15	9.8	1	1	3	125.0	15	9.8	8.0	12,310	1,531	370	4.1
HARDINGSTONE	7,530	167	167	22.1	119	15.8	6	7	14	83.8	120	15.9	12.9	32,542	7,568	1,942	3.8
KETTERING	13,000	289	290	22.3	128	9.8		17	23	79.3	145	11.1	9.9	49,337	12,895	2,966	4.3
MIDDLETON CHENEY	2,575	50	51	19.8	31	12.0		6	3	58.8	37	14.3	11.3	13,888	2,574	634	4.0
NORTHAMPTON	6,500	143	145	†25.1	141	20.7	77	21	10	68.9	85	†14.7	12.5	16,228	6,699	1,387	†4.0
OUNDLE	7,055	144	149	21.1	71	10.0	2	11	8	53.6	80	11.3	8.7	58,677	7,047	1,795	3.9
OXENDON	4,276	66	66	15.4	35	8.1		13	5	75.7	48	11.2	8.7	34,491	4,276	1,119	3.8
POTTERSPURY	5,189	89	89	17.1	66	12.7	8	4	8	89.8	62	11.9	9.6	19,914	5,189	1,275	4.0
THRAPSTON	10,659	189	189	17.7	145	13.6	6	14	17	89.9	153	14.3	11.8	36,836	10,649	2,576	4.1
TOWCESTER	10,183	187	187	17.8	156	14.8	4	11	18	96.2	163	15.5	12.2	42,457	10,482	2,612	4.0
WELLINGBOROUGH	12,610	222	224	17.7	127	10.0	3	18	17	75.8	142	11.2	10.0	33,115	12,594	3,045	4.1
Totals and Means for Combined RURAL DISTRICTS.	118,477	2,285	2,298	19.39	1,464	12.35	129	179	190	82.68	1,514	12.77	10.56	541,647	118,237	28,980	†4.0
Totals and Means for ADMINIS- TRATIVE COUNTY.	215,579	4,283	4,296	19.92	2,471	11.46	206	260	368	85.66	2,525	11.71	10.58	581,679	213,733	49,703	†4.2

* Rates in columns 5, 7, and 13 calculated per 1,000 of estimated population. † Berry Wood Asylum population excluded for the purposes of these calculations.
 § "Transferable deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they usually resided.
 NOTE.—The deaths in column 6 are the whole of those registered during the year as having actually occurred within the districts. The deaths in column 12 are the number in column 6 corrected by the subtraction of the number in column 8, and by addition of the number in column 9.



Table III.

TABLE showing the deaths of persons belonging to the Administrative County of Northampton which occurred in Berry Wood Asylum during the year 1913, as supplied by the Medical Superintendent.

CAUSES OF DEATH.	Deaths at							Deaths in Localities.																											
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	URBAN.														RURAL.													
								Brackley Borough.	Daventry Borough.	Higham Ferrers Borough.	Desborough.	Finedon.	Irthlingborough.	Kettering.	Oundle.	Raunds.	Rothwell.	Rushden.	Wellingborough.	Brackley	Brixworth.	Crick.	Daventry.	Easton-on-the-Hill.	Gretton.	Hardingstone.	Kettering.	Middleton Cheney.	Northampton.	Oundle.	Oxendon.	Potterspury.	Thrapston.	Towcester.	Wellingborough.
Phthisis (Pulmonary Tuberculosis) ...	9			1	2	6							3		1			1				2							1			1			
Tuberculous Meningitis ...	1				1																				1										
Cancer, Malignant Disease ...	3					1	2		1							1			1																
Organic Heart Disease ...	20					7	13		1			1		2				1	2		2		1			1	1				1	3	2		2
Pneumonia (all forms) ...	1						1																									1			
Nephritis & Bright's Disease ...	1						1																						1						
Congenital Debility and Malformation, including Premature Birth ...	1					1								1																					
Violent Deaths, excluding Suicide ...	1					1																											1		
Other Defined Diseases ...	16			1		11	4					1		3				1	2							2	2	1					3	1	
TOTALS ...	53			2	3	27	21		2			2		9		1	1	2	5	1	2		3			3	4	1		2	1	3	7	2	2



CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

TABLE IV.

URBAN DISTRICTS.	AGES OF CASES NOTIFIED.								NUMBER AND CLASS OF CASES NOTIFIED.													NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.											
	At all ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards	Small Pox.	Cholera.	Diphtheria (including Membranous Croup.)	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Puerperal Fever.	Cerebro-Spinal Meningitis.	Polionmyelitis.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	TOTALS.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup.)	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Puerperal Fever.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	TOTALS.	
BRACKLEY (BOROUGH)	1		1										1								1												
DAVENTRY (BOROUGH) (a)	16		1	4	4	5	1					2	4			2				7	1	16					1						1
HIGHAM FERRERS (BOROUGH) ...	12			6	4	1	1				2	1	2							3	1	12											
DESBOROUGH	33		5	9	10	8		1			5	3	10							9	6	33											
FINEDON	10		1	6	2		1				2		2							6		10											
IRTHLINGBOROUGH	9		1	6	1	1						1	6		2							9											
KETTERING	683	1	100	344	104	100	30	4	1		124	18	325		14	2	1	1	144	53	683	1		47		126		8					182
OUNDLE	13	1	1	5	3	3					1	1	1							9	1	13											
RAUNDS	41		3	16	7	9	5	1			1	3	14		1					19	3	41											
ROTHWELL	36		6	26	2	2					16		17			1				2		36											
RUSHDEN	124	1	13	53	29	22	5	1			10	8	52		1					41	12	124											
WELLINGBOROUGH	155		21	74	19	24	12	5			16	15	67		2					43	12	155					56						56
Totals for Combined Urban Districts ...	1,133	3	153	549	185	175	55	12	1		177	52	501		20	5	1	1	283	92	1,133	1		47		183		8					239

(a) One age not given.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

Table IV.

RURAL DISTRICTS.	AGES OF CASES NOTIFIED.								NUMBER AND CLASS OF CASES NOTIFIED.														NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.										
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup.)	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Puerperal Fever.	Cerebro-spinal Meningitis.	Polionmyelitis.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Chicken Pox.	TOTALS.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup.)	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Puerperal Fever.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	TOTALS.
BRACKLEY	(a)14										1	3	10									14											
BRIXWORTH	83		15	30	11	19	8				12	5	38		2					26		83			1		18		1				20
CRICK	3				2	1							1						2			3											
DAVENTRY	91		9	32	13	22	12	3			8	9	32						36	6		91			5		28						33
EASTON-ON-THE-HILL	9		1	4		3	1						2						3	4		9											
GRETTON	5		1		1	3					1								3	1		5											
HARDINGSTONE	(b)55		5	27	5	6	3				2	2	31		3	2			7	1	7	55					13						13
KETTERING	93		12	43	16	18	2	2			7	7	48		3				25	3		93			3		16		3				22
MIDDLETON CHENEY	17		2	12	3							2	13						2			17											
NORTHAMPTON	(c)44		1	3	3	12	2				3	1	23		1				13	3		44					†3		*1				4
OUNDLE	42		6	13	12	5	4	2			2	4	16		3				12	5		42					11		‡1		2		14
OXENDON	6			1	1	2	2					1	1						4			6											
POTTERSPURY	23		1	9	2	9	2				3	3			5				9	3		23											
THRAPSTON	77	3	16	26	15	11	4	2				3	31		2		1		24	16		77											
TOWCESTER	33		2	15	6	4	6				8	3	6		3				9	4		33											
WELLINGBOROUGH	154	1	19	51	35	32	12	4			10	14	50		5				67	8		154											
Totals for Combined Rural Districts ...	749	4	90	266	125	147	58	13			57	57	302		27	2	1		242	54	7	749			9		89		6		2		106

(a) Ages not given.

(b) Ages of nine cases not given.

(c) Ages of twenty-three cases not given.

† To Hardingstone Hospital.

* To Northampton General Hospital.

‡ To Stamford Infirmary.

INFANTILE MORTALITY DURING THE YEAR 1913.

Table V.

DISTRICTS.	NETT BIRTHS IN THE YEAR.		AGES AT DEATH UNDER ONE YEAR OF AGE.									Total Deaths under 1 Year.	All Causes.		Nett Deaths in the year of		DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.																													
	Legitimate.	Illegitimate.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.		Certified.	Uncertified.	Legitimate Infants.	Illegitimate Infants.	Small Pox.	Chicken Pox.	Measles.	Scarlet Fever.	Diphtheria and Croup.	Whooping Cough.	Diarrhoea.	Enteritis.	Tuberculous Meningitis.	Abdominal Tuberculosis.	Other Tuberculous Diseases.	Congenital Malformations.	Premature Birth.	Atrophy, Debility, and Marasmus.	Atelectasis.	Injury at Birth.	Erysipelas.	Syphilis.	Rickets.	Meningitis (not Tuberculous).	Convulsions.	Gastritis.	Laryngitis.	Bronchitis.	Pneumonia (all forms.)	Suffocation, overlying.	Other Causes.			
URBAN :—																																														
BRACKLEY (BOROUGH)	48	2	1				1					1	1		1																															
DAVENTRY (BOROUGH)	67	6	2	1		1	4	1	3	1		9	9		9						1	1	1	1		1		1	2			1														
HIGHAM FERRERS (BOROUGH)	53	3	3		1		4				1	5	4	1	4	1													4											1						
DESBOROUGH	88	4	2		2	1	5	2	1	1	1	10	10		9	1							1					2	1	2											1				3	
FINEDON	78	5	5		1		6		1		2	9	9		8	1												1	6									1								
IRTHLINGBOROUGH	106	2	3				3		2			5	5		5										1				1	1															2	
KETTERING	615	34	24	5	5	4	38	15	4	6	8	71	69	2	66	5							1	2				4	17	21		3					1	1	1		4	10	2	4		
OUNDLE	44							2	1			3	3		3											1				1										1						
RAUNDS	79	2	3				3	1	2	1		7	7		7							1					2		3										1							
ROTHWELL	114	6	2	2	2		6	1	1	2	1	11	11		11								3						1	1								1		1				4		
RUSHDEN	225	9	5	2	3	1	11	4	1	1	2	19	19*		19*				2						1			13												1				2		
WELLINGBOROUGH	389	16	8		3		11	4	7	2	4	28	23		28*				1				1	1		1	1	6	4		1		1	1	1				2	3			1			
Totals for Combined Urban Districts	1,909	89	58	10	17	7	92	30	23	14	19	178	175	3	169	9			3		1	1	3	8	3	2	3	25	41	30		5		1	1	2	2	1	1	10	16	2	17			
RURAL :—																																														
BRACKLEY	126	7	3		2	1	6	1	1		1	9	9		9								1					2	2											1		1	1			
BRINWORTH	214	12	2	2	1	1	6	4	4	2	4	20	20*		16	4			1			1	1	3				1	3	3										1	4	2				
CRICK	45	1	2				2	1		1		4	4		4													1	1												1	1				
DAVENTRY	272	10	6	2	1	2	11	4		4	7	26	24	2	24	2		1	1										1	7									2		2	3		9		
EASTON-ON-THE-HILL	29	1	1				1		3		1	5	5		5				1										1	1											2					
GRETTON	21*		2				2		1			3	3		3															1										1	1					
HARDINGSTONE	167*		3	2		1	6	2		3	3	14	14*		14*								2	1					3	1											2					
KETTERING	257	3	10	4			14	2	2	2	3	23	23*		23*								1						7	4											3	1			7	
MIDDLETON CHENEY	51*		1	1			2				1	3	3*		3							1							1														1			
NORTHAMPTON	143	2	3	2		1	6	1	2	1		10	10		10								1			1		2	3	1															1	
OUNDLE	135	14	3		1	1	5	1		2		8	7	1	7	1												1	2																1	
OXENDON	61	2	1	1		1	3	1		1		5	5		5									1					1	2											1					
POTTERSPURY	88	1	2		2	1	5	1	1		1	8	8*		8									1	1				1	3																
THRAPSTON	183	1	6	3		1	10	2	2	2	1	17	16	1	16	1						2	1	1	1				6	2															1	
TOWCESTER	176	11	1	1	1	2	5	6	4	1	2	18	17	1	17	1					1								5																2	
WELLINGBOROUGH	200	24	3	4	3		10	5	1		1	17	17		17*								1				1	1	5	1	1															3
Totals for Combined Rural Districts...	2,209	89	49	22	11	12	94	31	21	19	25	190	185	5	181	9		1	3		1	5	8	9	1	1	1	8	42	26	1						1	14	2	2	18	18	3	25		
Totals for Administrative County	4,118	178	107	32	28	19	186	61	44	33	44	368	360	8	350	18		1	6		2	6	11	17	4	3	4	33	83	56	1	5		1	1	3	16	3	3	28	34	5	42			

* Not separated.

FACTORY AND WORKSHOP ACT, 1901.

I.

DISTRICTS.	INSPECTION OF PREMISES.						NUISANCES UNDER THE PUBLIC HEALTH ACTS, INCLUDING THOSE SPECIFIED IN SECTIONS 2, 3, 7, AND 8 OF THE FACTORY ACT, AS REMEDIABLE UNDER THE PUBLIC HEALTH ACTS.									OFFENCES UNDER THE FACTORY AND WORKSHOP ACT.			MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES.					UNDERGROUND BAKEHOUSES (S. 101.)	
	Number of Inspections.			Number of Written Notices.			Want of Cleanli-ness.	Want of Ventila-tion.	Over-crowd-ing.	Want of Drainage of Floors.	Other Nui-sances.	Sanitary Accommodation.			Illegal Occupation of Underground Bakehouse (S. 101.)	Breach of special sanitary requirements for Bakehouses (SS. 97 to 100.)	Other offences (excluding offences relating to outwork.)	Failure to affix Abstract of the Factory and Workshop Act (S. 133.)	Action taken in matters referred by H.M. Inspector or as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5.)		Other.	Certificates granted during the year.	In use at the end of the year.		
	Factories (including Factory Laundries.)	Workshops (including Workshop Laundries.)	Workplaces (other than Out-workers' premises.)	Factories (including Factory Laundries.)	Workshops (including Workshop Laundries.)	Workplaces (other than Out-workers' premises.)						In-sufficient.	Unsuitable or Defective.	Not separate for sexes.					Notified by H.M. Inspector.	Reports (of action taken) sent to H.M. Inspector.					
URBAN :—																									
BRACKLEY (BOROUGH)		24																							
DAVENTRY (BOROUGH)	20	80					*1						1						1	1					
HIGHAM FERRERS (BOROUGH) ...	37	47	6	3	5	4		1	2		9	2	4	1											
DESBOROUGH	17	27		13	10		10	4	1		2	2							1	1					
FINEDON	23	16	21	3	4	4	7		1			1	2	1											
IRTHLINGBOROUGH	39	27	24	7	4	3	9	3		1	5		3												
KETTERING	57	98	35	3	7	2	5				31	2	14	1		8		1	6					1	
OUNDLE		60	67																						
RAUNDS	66	51	23	14	1	1					4						1								
ROTHWELL	10	11						1					2	1					4	4					
RUSHDEN	74	105	21	2	7		†25				2	*2	2	1		7		2	1	2					
WELLINGBOROUGH	49	74		15	19		12		1		9	1	†10			21		3						2	
Combined URBAN DISTRICTS ...	392	623	200	60	57	14	69	9	5	1	62	10	38	5		36	1	6	13	8				3	
RURAL :—																									
BRACKLEY		1																							
BRIXWORTH			7																						
CRICK		31			12		12																		
DAVENTRY	8	74		1	29		26		3		2		†2					6							
EASTON-ON-THE-HILL		38																							
GRETTON	4		14													1									
HARDINGSTONE	6	34			4		4				2					5									
KETTERING	19	17	25				2																		
MIDDLETON CHENEY																									
NORTHAMPTON	2	30			4		4																		
OUNDLE	2	71					1																		
OXENDON		50			1								‡1							1					
POTTERS PURY	2	14																						1	
THRAPSTON	11	65	28	4	6	4	5				4		1						1						
TOWCESTER	5	49					13																		
WELLINGBOROUGH	48	71	45	13	6	9	15	3			5	2	15			‡4			2	2					
Combined RURAL DISTRICTS ...	107	551	119	18	62	13	82	3	3		13	2	19			10		6	3	3				1	
ADMINISTRATIVE COUNTY ...	499	1,174	319	78	119	27	151	12	8	1	75	12	57	5		46	1	12	16	11				4	

* Not remedied.

† One not remedied.

‡ One referred to H.M. Inspector.



FACTORY AND WORKSHOP ACT, 1901.
HOME WORK.

DISTRICTS.	OUTWORKERS' LISTS, SECTION 107.									OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.		Instances.	Notices served.	Prosecutions.	Instances.	Orders made. (Sec. 110.)	Prosecutions (Sections 109, 110.)
	Sending Twice in the year.			Sending once in the year.				Failing to keep or permit inspection of Lists.	Failing to send Lists.						
	Lists.	Outworkers. Con-tractors.	Work-men.	Lists.	Outworkers. Con-tractors.	Work-men.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
URBAN :—															
BRACKLEY (BOROUGH)															
DAVENTRY (BOROUGH)	6		26												
HIGHAM FERRERS (BOROUGH)	11		37												
DESBOROUGH	14		232				4			3	3		3	3	
FINEDON	10		82												
IRTHLINGBOROUGH	8	6	48				4								
KETTERING	78	11	511	7		18	79			17	17		16	16	
OUNDLE															
RAUNDS	4		18	8		48	8								
ROTHWELL	5		55												
RUSHDEN	52		732	2		13	68			5			2		
WELLINGBOROUGH	36	66	160							2	2				
Combined URBAN DISTRICTS ...	224	83	1,901	17		79	163			27	22		21	19	
RURAL :—															
BRACKLEY															
BRIXWORTH				1		1									
CRICK															
DAVENTRY	10		232	2		7	10								
EASTON-ON-THE-HILL															
GRETTON				1	1	30									
HARDINGSTONE			60												
KETTERING	20		403												
MIDDLETON CHENEY															
NORTHAMPTON			48												
OUNDLE															
OXENDON	6		36				2								
POTTERSPURY															
THRAPSTON	15	3	3												
TOWCESTER	4	2	50							13					
WELLINGBOROUGH	11	5	368	5	4	76	22		8	6	6		5	5	
Combined RURAL DISTRICTS ...	66	10	1,200	9	5	114	34		8	19	6		5	5	
ADMINISTRATIVE COUNTY ...	290	93	3,101	26	5	193	197		8	46	28		26	24	

The whole of the outworkers given above (with the exception of two at Kettering and eight at Wellingborough engaged in brush-making, and six in the Thrapston Rural District engaged as follows:—Cart Gear 3, Furniture and Upholstery 2, and Umbrella 1), were in respect of the making, etc., of wearing apparel, principally boots and shoes.



Table showing the Important and other classes of Workshops in the Districts.

DISTRICTS.	NUMBER AND CLASS OF WORKSHOPS.																	Total Number of Workshops on Register.
	Bakehouses.	Slaughter-houses.	Dairies and Cowsheds.	Saddlers.	Monu-mental Masons.	Boot and Shoe Trade.	Dress-making, Tailoring, and Millinery.	Cabinet Makers, Joiners, and Builders.	Wheel-wrights, Coach-builders, and Blacksmiths.	Plumbers and Glaziers.	Motor Works, Bicycle Works, &c.	Tinsmiths.	Iron and Engineering Works.	Basket Making.	Printers.	Laundries.	Unspecified.	
URBAN :—																		
BRACKLEY (BOROUGH)																	24	24
DAVENTRY (BOROUGH)	9	5		2		22	6	8	3		2	3			2	1	6	69
HIGHAM FERRERS (BOROUGH)																	9	9
DESBOROUGH	7	3															15	25
FINEDON																	16	16
IRTHLINGBOROUGH	7					8	10								1			26
KETTERING	29					21	39										136	225
OUNDLE	7	6	7														45	65
RAUNDS	6					2	7				3			1	1			20
ROTHWELL	8																16	24
RUSHDEN	17						28										52	97
WELLINGBOROUGH	31																172	203
Combined Urban Districts	121	14	7	2		53	90	8	3		5	3		1	4	1	491	803
RURAL :—																		
BRACKLEY																	1	1
BRIXWORTH																		Nil
CRICK	6																22	28
DAVENTRY	22			4		15	6	2	29		3					1		82
EASTON-ON-THE-HILL																	38	38
GRETTON	5			1		1	1											8
HARDINGSTONE																	29	29
KETTERING	39																36	75
MIDDLETON CHENEY																		nil
NORTHAMPTON																	23	23
OUNDLE	26						4		7		2					2		41
OXENDON	12					1	1	10								1		25
POTTERS PURY											1		1					2
THRAPSTON																	104	104
TOWCESTER	29			3	1	5	6		5	1		1			3			54
WELLINGBOROUGH	26					17	7										20	70
Combined Rural Districts	165			8	1	39	25	12	41	1	6	1	1		3	4	273	580
ADMINISTRATIVE COUNTY	286	14	7	10	1	92	115	20	44	1	11	4	1	1	7	5	764	1383

